

# Open Research Online

---

The Open University's repository of research publications and other research outputs

## Changing your trainers? Is reaction evaluation used by Primary National Strategy consultants to support development of their training skills?

### Thesis

#### How to cite:

Davies, Janet (2007). Changing your trainers? Is reaction evaluation used by Primary National Strategy consultants to support development of their training skills? EdD thesis The Open University.

For guidance on citations see [FAQs](#).

© 2007 The Author



<https://creativecommons.org/licenses/by-nc-nd/4.0/>

Version: Version of Record

Link(s) to article on publisher's website:

<http://dx.doi.org/doi:10.21954/ou.ro.0000ea2f>

---

Copyright and Moral Rights for the articles on this site are retained by the individual authors and/or other copyright owners. For more information on Open Research Online's data [policy](#) on reuse of materials please consult the policies page.

---

[oro.open.ac.uk](http://oro.open.ac.uk)

# **Doctor of Education (EdD)**

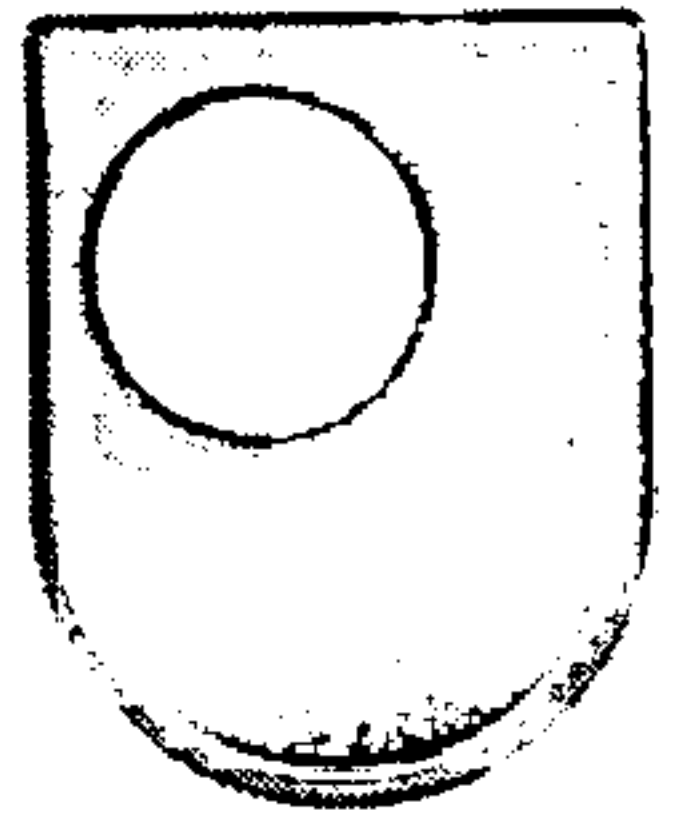
## **Changing your trainers?**

**Is reaction evaluation used by Primary National  
Strategy consultants to support development of  
their training skills?**

**Janet Davies**

**M7005604**

**2007**



# Faculty of Education and Language Studies Doctorate in Education

## Library Authorisation Form

Please return this form with your bound dissertations.

Student: JANET DAVIES PI: M7005604

Degree: Doctorate in Education

Dissertation Title: CHANGING YOUR TRAINERS?

IS REACTION EVALUATION USED BY PRIMARY NATIONAL

STRATEGY CONSULTANTS TO SUPPORT DEVELOPMENT OF THEIR  
TRAINING SKILLS?

### Open University Library Authorisation

I confirm that I am willing for my dissertation to be made available to readers by the Open University Library and that it may be photocopied, subject to the discretion of the Librarian.

Signed: Janet Davies

Dated: 21.5.07

### British Library Authorisation

If you want a copy of your EdD dissertation to be available on loan to the British Library Thesis Service as and when it is requested, you must sign a British Library Doctoral Thesis Agreement Form. Please return it as mentioned above with this form. The British Library will publicise the details of your dissertation and may request a copy on loan from the University Library. Information on the presentation of the dissertation is given in the Agreement Form.

The University has agreed that your participation in the British Library Thesis Service should be voluntary. Please tick either (a) or (b) to indicate your intentions.

(a) ☒ I am willing for the Open University to loan the British Library a copy of my dissertation. A signed Agreement Form is attached.

(b) ☐ I do not wish the Open University to loan the British Library a copy of my dissertation.

Signed: Janet Davies

Dated: 21.5.07

LIST OF TABLES AND FIGURES	5
<b>CHAPTER 1 INTRODUCTION</b>	<b>7</b>
THE WIDER RESEARCH CONTEXT	8
NARROWING THE RESEARCH CONTEXT	9
DEVELOPING THE RESEARCH CONTEXT	10
DEVELOPING A DEFINITION OF TRAINING AND TRAINING SKILLS	11
THE EVALUATION OF TRAINING – AN OVERVIEW	12
<i>Evaluation as evidence of accountability</i>	12
<i>The value of reaction evaluation</i>	14
EVALUATION IN THE CONTEXT OF PNS TRAINERS	16
<i>Teacher Development within Children’s Services</i>	16
<i>The Accountability of Primary National Strategy Consultants</i>	17
RATIONALE OF THE RESEARCH	19
THE AIM OF THE RESEARCH	21
<b>CHAPTER 2 LITERATURE REVIEW</b>	<b>23</b>
INTRODUCTION	24
IDENTIFYING THE RESEARCH AREAS	24
<i>Theory of evaluation</i>	24
<i>Learning theory within professional work</i>	25
THEORY OF EVALUATION	26
REACTION EVALUATION – THE FEEDBACK FUNCTION	26
REACTION EVALUATION – ITS ESTABLISHMENT AS A KEY EVALUATION METHOD	27
<i>The development of models of evaluation</i>	27
REACTION EVALUATION - ITS ROLE FOR TRAINERS AND ORGANISATIONS	30
<i>The measurement of learning transfer</i>	30
<i>The moderation between training motivation and learning</i>	32
<i>Reaction evaluation – its usefulness to trainers</i>	33
<i>Reaction evaluation - supporting quality assurance and performance management</i>	36
<i>Reaction evaluation - motivating personal improvement</i>	37
REACTION EVALUATION INTO PRACTICE	38
FEEDBACK THEORY IN PROFESSIONAL WORK	38
DEFINING FEEDBACK (IN THE CONTEXT OF REACTION EVALUATION)	38
<i>The nature of feedback within behaviourist and cognitive perspectives.</i>	39
<i>Exploring reaction evaluation within the behaviourist and cognitive perspectives.</i>	39
THE COMPLEX ROLE OF FEEDBACK IN LEARNING	41
<i>Will feedback improve performance?</i>	41
<i>Feedback as part of a learning cycle</i>	43
<i>The value of feedback and response of feedback</i>	44
<i>The influence of power on feedback</i>	46
<i>The influence of emotion on feedback</i>	48
FEEDBACK INTO PRACTICE	50



<b>REACTION EVALUATION AS PRACTICE FEEDBACK FOR PRIMARY STRATEGY CONSULTANTS.</b>	<b>52</b>
<b>ISSUES OF SHARED DISCOURSE IN REACTION EVALUATION</b>	<b>53</b>
<i>Shared discourse of course objectives</i>	53
<i>The nature of reaction evaluation: a challenge to shared discourse?</i>	53
<i>Design of reaction evaluation: a challenge to shared discourse?</i>	54
<b>ISSUES OF OWNERSHIP IN REACTION EVALUATION</b>	<b>55</b>
<i>The influence of power</i>	55
<i>Responsibility for learning.</i>	57
<i>Relevance of roles</i>	57
<b>CONCLUSION</b>	<b>59</b>
 <b>CHAPTER 3      METHODOLOGY</b>	 <b>61</b>
<b>INTRODUCTION</b>	<b>62</b>
<b>RESEARCH METHODOLOGY</b>	<b>62</b>
<b>THE CONTEXT OF EDUCATIONAL RESEARCH METHODOLOGY</b>	<b>62</b>
<b>PLACING THE RESEARCH WITHIN THE WIDER METHODOLOGICAL CONTEXT</b>	<b>63</b>
<b>GENERATING THEORY</b>	<b>65</b>
<b>THE DEVELOPMENT OF THE RESEARCH SEQUENCE</b>	<b>67</b>
<b>THE INITIAL STUDY</b>	<b>67</b>
<b>THE ROLE OF THE INITIAL STUDY</b>	<b>67</b>
<b>THE METHODOLOGY OF THE INITIAL STUDY</b>	<b>69</b>
<i>Early pitfalls.</i>	69
<i>Moving on with the initial study</i>	70
<i>The Initial Study Interviews</i>	71
<i>The interview schedule design</i>	71
<i>The interview questions</i>	73
<b>SO WHERE DID THE INITIAL STUDY LEAD?</b>	<b>74</b>
<b>HOW THE MAIN RESEARCH WAS INFORMED BY THE INITIAL STUDY</b>	<b>74</b>
<b>REDEFINING THE RESEARCH QUESTION</b>	<b>74</b>
<b>REDEFINING THE RESEARCH CONTEXT</b>	<b>75</b>
<b>DEVELOPING THE MAIN STUDY METHODOLOGY</b>	<b>76</b>
<i>Developing a shared understanding of feedback factors</i>	77
<i>Validation of the feedback factor list</i>	78
<i>Agreeing a 'common language' related to training skills.</i>	78
<i>The development of the main study sample</i>	79
<b>THE DEVELOPMENT OF THE MAIN STUDY</b>	<b>80</b>
<b>THE COLLECTION OF QUANTITATIVE DATA</b>	<b>82</b>
<i>Collecting data on the relative frequency of feedback factor use</i>	82
<i>Collecting data on which feedback factors are used to support which training skills</i>	82
<b>THE COLLECTION OF QUALITATIVE DATA</b>	<b>83</b>
<b>ISSUES OF VALIDITY AND RELIABILITY</b>	<b>84</b>
<i>The validity and reliability of the sample</i>	85
<i>The role of the researcher as 'insider'</i>	85
<i>The role of the 'insider' researcher as interviewer</i>	88
<b>ETHICAL ISSUES</b>	<b>89</b>
<b>THE NATURE OF THE RESEARCH PROJECT</b>	<b>89</b>

Confidentiality	89
Informed consent	90
The researcher / respondent relationship	92
Access and acceptance	93
<b>CONCLUSION</b>	<b>94</b>
<b>CHAPTER 4</b>	<b>95</b>
<b>BEGINNING TO INTERPRET TRAINERS' USE OF REACTION EVALUATION</b>	
INTRODUCTION	96
THE IDENTIFICATION OF FEEDBACK FACTORS	96
A CATEGORISATION OF FEEDBACK FACTORS	98
INVESTIGATING TRAINERS' REASONS FOR USING PARTICULAR FEEDBACK FACTORS	101
CONCLUSION	106
HOW DO THESE INITIAL STUDY FINDINGS RELATE TO THE INITIAL RESEARCH QUESTION?	106
<b>CHAPTER 5</b>	<b>108</b>
<b>PNS CONSULTANT RESPONSE TO REACTION EVALUATION</b>	
INTRODUCTION	109
DO CONSULTANTS USE FEEDBACK?	109
DO CONSULTANTS USE REACTION EVALUATION?	114
HOW IMPORTANT IS REACTION EVALUATION AS FEEDBACK?	116
<i>Deepening the understanding of the importance of reaction evaluation</i>	116
<i>Further variation in the consultants' use of reaction evaluation</i>	118
EXPLORING THE ROLE OF FORMAL FEEDBACK FOR CONSULTANTS	119
CONCLUSION	124
<b>CHAPTER 6</b>	<b>125</b>
<b>REACTION EVALUATION: KEY THEMES FOR PNS CONSULTANTS</b>	
INTRODUCTION	126
DEVELOPING A VIEW OF THE RELATIVE IMPORTANCE OF EACH CATEGORY.	127
REACTION EVALUATION - USERS and NON USERS	130
WHAT DO CONSULTANTS SAY ABOUT REACTION EVALUATION?	131
Theme 1:	134
<i>The quality and nature of the information relayed to consultants through reaction evaluation.</i>	
Theme 2:	136
<i>The role of reaction evaluation within the training organisation.</i>	
Theme 3:	138

<i>The usefulness of rating-scale grades and open-ended question comments in reaction evaluation for trainers' own training development.</i>	139
<i>The usefulness of rating-scale grades</i>	144
<i>The usefulness of open-ended question comments</i>	150
Theme 4:	
<i>The nature of participant engagement with the reaction evaluation process, and with learning.</i>	
<b>SYNTHESISING THE FOUR THEMES</b>	<b>155</b>
<b>CONCLUSION</b>	<b>160</b>
<b>CHAPTER 7</b>	<b>162</b>
<b>THE CAPACITY OF REACTION EVALUATION TO SUPPORT PNS CONSULTANTS' TRAINING SKILL DEVELOPMENT</b>	
<b>INTRODUCTION</b>	<b>163</b>
<b>RETURNING TO THE INVESTIGATIVE QUESTIONS: USING CONCLUSIONS FROM THE QUANTITATIVE AND QUALITATIVE ANALYSIS.</b>	<b>164</b>
WHAT FEEDBACK FACTORS DO CONSULTANTS IDENTIFY AS SUPPORTING DEVELOPMENT OF THEIR TRAINING SKILLS?	164
WHAT PART DOES REACTION EVALUATION PLAY AS FEEDBACK TO SUPPORT TRAINING SKILLS DEVELOPMENT, IN RELATION TO OTHER FEEDBACK FACTORS IDENTIFIED BY CONSULTANTS?	166
<i>To what extent then does this comparison with other feedback factors, reflect past research into feedback and reaction evaluation?</i>	167
WHAT REASONS DO CONSULTANTS GIVE FOR VALUING THE FEEDBACK FACTORS THEY USE MOST OFTEN?	170
WHAT REASONS DO CONSULTANTS GIVE FOR QUERYING THE VALUE OF FEEDBACK FACTORS THEY USE LESS FREQUENTLY?	170
<b>PAINTING A PICTURE OF REACTION EVALUATION USE BY PNS CONSULTANTS</b>	<b>175</b>
<b>IMPLICATIONS OF THE RESEARCH FOR TRAINING ENVIRONMENTS</b>	<b>178</b>
IMPLICATIONS FOR THE DEVELOPMENT OF COURSE EVALUATION	179
<i>The Issue of Subjectivity</i>	182
<i>The Issue of Standardisation</i>	183
<i>The Issue of Participant Reflection</i>	185
<i>The Issue of Appropriate Discourse</i>	188
<i>The Importance of Differing Consultant Response</i>	188
IMPLICATIONS FOR THE DEVELOPMENT OF CONSULTANTS' CPD	189
<i>Developing CPD in response to feedback</i>	190
<i>The use of Professional Knowledge and Understanding</i>	191
<i>Teaching versus Training Skills</i>	191
<b>CONCLUSION</b>	<b>193</b>
<b>REFERENCES</b>	<b>197</b>
<b>APPENDICES</b>	<b>205</b>



## **LIST OF TABLES AND FIGURES**

### **TABLES**

<b>3.1</b>	<b><i>The Original Research Design</i></b>	<b>68</b>
<b>3.2</b>	<b><i>The Main Study Research Sequence</i></b>	<b>81</b>
<b>4.1</b>	<b><i>The ten feedback factors identified from semi-structured interview data</i></b>	<b>97</b>
<b>4.2</b>	<b><i>References made to feedback factors during interview</i></b>	<b>97</b>
<b>4.3</b>	<b><i>The sub-divisions of feedback factors and motivational factors</i></b>	<b>98</b>
<b>4.4</b>	<b><i>The commonly identified feedback factors, ranked in order of significance</i></b>	<b>100</b>
<b>5.1</b>	<b><i>Median score for each feedback factor</i></b>	<b>118</b>
<b>5.2</b>	<b><i>The feedback factor sub-divisions organised with a focus on ‘when’ consultants received the feedback</i></b>	<b>122</b>
<b>6.1</b>	<b><i>The rating scale section of the reaction evaluation form</i></b>	<b>141</b>
<b>6.2</b>	<b><i>The open-ended question section of the reaction evaluation</i></b>	<b>144</b>

### **FIGURES**

<b>5.1</b>	<b><i>Totals of feedback use for each consultant</i></b>	<b>110</b>
<b>5.2</b>	<b><i>Total number of ‘frequently used’ feedback factors identified by each consultant</i></b>	<b>111</b>
<b>5.3</b>	<b><i>Comparison of ‘frequently used’ feedback factors and total feedback use</i></b>	<b>111</b>



5.4	<i>Comparing two consultants' use of feedback factors</i>	113
5.5	<i>Total consultant response for each feedback factor</i>	115
5.6	<i>Total feedback responses for each consultant compared with their total reaction evaluation responses</i>	117
5.7	<i>Feedback response totals for all consultants shown in subdivisions</i>	120
5.8	<i>The 'origin' feedback sub-divisions</i>	121
5.9	<i>The 'time' focused sub-divisions</i>	123
6.1	<i>Interview responses totalled by category</i>	128
6.2	<i>The interview responses for Category 4 shown by respondent</i>	130

# CHAPTER 1

## INTRODUCTION

### THE RESEARCH CONTEXT AND RESEARCH AIMS

***'I don't mean this unkindly, but the whole presentation style reminded me of a performance by Hinge and Brackett.'***  
***(a comment from a reaction evaluation completed by a primary teacher)***

## THE WIDER RESEARCH CONTEXT

For over seventy years trainers have discussed, written about and implemented evaluation activities to measure the value of training and learning (Seels and Richey, 1994, p52). During this time, models of evaluation have been developed that assist both formative and summative evaluation; formative evaluation happening whilst the training programme is in progress, with summative evaluation acting as an assessment of the training impact following the completion of the training (Kirkpatrick, 1967; Holton, 1996; Holton & Bates, 1998; Preskill & Torres, 1999).

Agencies investing in training require training outcomes to be effective; agencies providing training are required to be accountable for these effective outcomes. The assessment function of summative evaluation provides evidence to support this accountability, through measures of trainee learning and the impact of that learning in the workplace. However, training does not only involve a financial investment, and both trainees and trainers may be seen to invest in training, through investment of time, effort and professional experience. For trainees the impact of training may influence their future work, whilst for trainers the provision of effective training demonstrates their professional skill.

This connection, between summative evaluation and training accountability, may suggest that evaluation feedback has an influence on trainers, as they seek to demonstrate and improve their training capabilities. In its assessment role, evaluation may motivate their drive to increase the impact of training for participants. By acting on the evaluation feedback, when planning future training and further development of their own training skills, trainers will demonstrate this

influence through the changes they make, and will be playing a part in improving training accountability.

### *NARROWING THE RESEARCH CONTEXT*

My research seeks to investigate the possibility that part of the trainer's response to evaluation feedback may be an impetus to improve training skills. By focusing on one method of evaluation, and one group of trainers, I aim to consider whether evaluation feedback motivates the trainers to develop their own training methods and behaviours.

The group of trainers chosen for the research is a group of Primary National Strategy (PNS) consultants, employed by a Local Authority (LA) as part of the school improvement 'arm' of the Children's Services Department. These consultants are predominantly involved with providing continued professional development (CPD) for serving teachers employed by LA schools, and the training they run usually takes the form of half or day long courses. Delivering training is an important part of the consultants' work, but it does not take up the majority of their time. Consequently, to reflect the distinction between them and individuals whose sole role is the provision of training, I use the term 'consultant' when referring to my specific sample group, and the term 'trainer' when I make reference to trainers in the broader context of CPD.

As I also hold the role of a PNS consultant, this research has the potential to support an exploration of both the response of a group of trainers to a form of evaluation feedback, and of my own motivation to improve my skills through evaluation feedback.

PNS training is usually evaluated through a summative evaluation method widely used for short course evaluation within both educational and business training organisations. Normally completed



directly the course ends, and before participants leave for home, this evaluation requires participants to complete a response form; variously called 'course evaluation forms', 'participant response forms', 'reaction evaluations' or, more colloquially, 'smile sheets'.

It is the evaluation method with which most trainers have most contact, and because of this shared experience it is the method I have selected for study. Throughout my research I have chosen to call these 'reaction evaluations', a term used by Cantalanello and Kirkpatrick (1968) when referring to these response forms. I believe that this term most succinctly defines both the evaluation process and product.

What interests me is the trainer response to this predominant form of evaluation. How do trainers receive participant response feedback, and how does it impact and influence the trainers' own further development of training skills?

### *DEVELOPING THE RESEARCH CONTEXT*

This chapter seeks to expand the research context by:

- developing a definition of 'training' and 'training skills' within the context of PNS consultants;
- offering an overview of the context of training evaluation, linking to the context of PNS consultants;
- introducing the research rationale and research questions on which my thesis is based.

## DEVELOPING A DEFINITION OF TRAINING AND TRAINING SKILLS

Training can be defined as ‘a planned and systematic effort to modify or develop knowledge / skill / attitude through learning experience, to achieve effective performance in an activity or range of activities’ (Buckley & Caple, 2004, p 5), and as such is a process closely connected to professional development activities within the workplace.

Training activities take many forms, and their aims are varied and often clearly related to the workplace (organisational) context. They will include:

- instructional training in the use of new products or machinery;
- explanation of and instruction in new organisational policy;
- instructional training in new skills development relevant to the trainee’s workplace role.

Training forms part of the wider context of CPD for employees, and its role will be linked to the professional requirements of the employees within any particular organisation. It may be carried out as short contained training events (courses) led by a trainer, where, in as little as half a day, the necessary instruction can be transferred. Alternatively, it may form part of a longer training programme lasting over a period of weeks or months, and may involve training delivered through a range of methods, for example, courses, peer coaching, supervisor observation or ‘blended learning’ (a mix of online and face-to-face training).

For a trainer certain skills are considered important for providing training in any context within this definition.

Trainers need to be able to:

- plan and deliver courses matched to participant training needs;
- structure courses to facilitate learning, and maintain participant involvement and interest;
- use delivery and presentation skills to engage participants, and to facilitate a clear understanding of course content.

Underlying these competencies, knowledge of learning is required which may be reflected in the course structure and in the course activities (Buckley & Caple, 2004).

Evaluation of training is of interest to organisations as it offers some opportunity to evaluate the trainers' knowledge and skills competencies, but it is recognised that evaluation of training exists in a much broader context than this.

## THE EVALUATION OF TRAINING – AN OVERVIEW

### *Evaluation as evidence of accountability*

There is a positivist view, supported by a number of models of evaluation (Kirkpatrick, 1959; Philips, 1996; Holton & Bates, 1998), that the training of employees is more likely to be related to economics than to an altruistic desire on the part of the organisation to support their employees' professional development for the sake of personal fulfilment.

These models are designed to provide evidence of training impact on the organisation through an improvement in organisational effectiveness, leading to improvement in organisational productivity. The link between the capital outlay (investment) on training, and the return on this investment is made clear through the emphasis on measuring not only trainee learning at the end of training, but also the transfer of that learning into the trainee's working practices, an



example being The Learning Transfer System (LTS) (Holton & Bates, 1998). The LTS seeks to take into account a range of variables, including motivation, opportunity to use learning, and peer support, which may impact on the transfer of learning into working practice. These variables were often ignored by earlier models, although the impact of learning on working practice was always acknowledged (Kirkpatrick, 1967; Philips, 1996).

The ability of training to create improvement in working practices, and consequentially organisational productivity, makes evaluation central to measuring the accountability of trainers, training organisations and training design. Training evaluation should be designed to provide evidence of impact, but design will differ depending on the nature of the training programme. Training programmes that extend over a long period of time could be supported by The LTS, but this evaluation model, because it requires detailed consideration of all variables related to transfer, is inappropriate for shorter training programmes, particularly where short training courses last one day or less.

Short training courses are routinely evaluated using participant response forms. Designed to measure a level of participant satisfaction immediately following the training, it can also be suggested that they provide an indication of the impact the training may have on the participants' working practices. Cantalanello and Kirkpatrick (1968) referred to these response forms as 'reaction evaluations', based as they are on participant reaction to training at one moment in time.

A benchmarking survey, completed by the American Society for Training and Development, found that 77 per cent of the organisations surveyed collected learner reaction (Van Buren, 2001). As it is the method of evaluation most commonly used by most organisations, it would appear that these figures support the



idea that reaction evaluation will be the evaluation method most likely to influence trainers to consider how training could be made more effective, and therefore supports my selection of this method as a focus for my research. However, whilst extensive use of reaction evaluation cannot be denied, it must be balanced against criticisms of reaction evaluation as an evaluation method.

### *The value of reaction evaluation*

It can be argued that reaction evaluation is valuable in supporting the accountability of both the trainers and the training organisation in the provision of training.

For trainers, reaction evaluation presents a measure of the participants' satisfaction with the training. It provides information on the success of activities and content in maintaining participant interest, and may offer the opportunity for participants to indicate course impact on future work. This participant feedback should enable trainers to reflect on the training they provide, and result in future training better adapted to meet the needs of participants.

In this role reaction evaluation should act to support the accountability of the trainers to participants (clients), and to the organisation funding the training. Trainers may be employed 'in house' by an organisation providing training for employees, or may be employed by an organisation whose function is to provide training for other organisations. Alternatively, a trainer may be independent, but whatever their context of employment reaction evaluation feedback will act to provide summative evaluation of training.

For an organisation, the completion and analysis of reaction evaluation supports that organisation's accountability to its stakeholders. These may be shareholders, reported to through a

board of directors, or, with private ownership, the owners of the company.

A number of aspects related to course provision may be supported by analysis of reaction evaluation and reported to stakeholders.

For example,

- completed reaction evaluation provides evidence that courses have taken place;
- analysis provides a record of participant satisfaction levels; which may relate to training content and methods;
- analysis may indicate future impact of the training for participants, and justify the funding of training to secure improvement;
- analysis may be used to monitor trainer effectiveness, and may be used as evidence of professional competence within performance management.

However, research has suggested that although impact of training may be indicated on a reaction evaluation this is not secure evidence for either learning, or future impact on working practices (Antheil & Casper, 1986; Carnevale & Schulz, 1990; Warr & Bunce, 1995), and any acceptance of this research would focus organisational use of reaction evaluation towards being used as a measure of trainer effectiveness, rather than as an indication of future improvements in productivity.

This raises the question that if reaction evaluation is being used by an organisation as a measure of trainer effectiveness, then should it have some role in supporting a trainer's own professional development? Do reaction evaluations help to inform a trainer of the way in which their training skills could be developed, thereby helping to improve their effectiveness, and can they act to motivate a trainer to further develop their training skills?

## ***EVALUATION IN THE CONTEXT OF PNS TRAINERS***

### ***Teacher Development within Children's Services***

Local Authority Children's Services departments combine all layers of support for children, social and educational, into one department, in order to fulfil the requirements of the Government's 'Every Child Matters' agenda. The aim, in developing links between all government agencies involved with working with children, is for every child, whatever their background or their circumstances, to have the support they need to:

- Be healthy
- Stay safe
- Enjoy and achieve
- Make a positive contribution
- Achieve economic well-being

(DfES, 2004)

Ensuring that all personnel employed in schools are able to play a positive role in this agenda is part of the function of those Children's Services' departments focused on schools and communities, and PNS consultants have a very specific role to play within this area of work.

PNS consultants assist individual schools to evaluate their own performance, through discussion with school Senior Management Teams, and monitor standards of teaching and learning within LA schools. In addition, they will provide training to all school personnel; headteachers, governors, and teaching assistants, as well as to teachers.

Much of this training is directly funded by the Department of Education and Skills (DfES), through 'The Standards Fund', a funding provision related to raising pupil attainment. This fund



allocates LAs funding to employ PNS consultants, focused on support for the Primary phase, and largely on two core curriculum subjects, English and Mathematics. Each year DfES highlight the main areas of training to be provided by PNS consultants for schools. There is scope to provide other types of training for schools, but for PNS consultants the Standards Fund requirement means that time allocation to other areas of training is very small.

Training is delivered predominantly through short courses, lasting either a day or half day. Course content or guidelines are provided from the DfES Primary National Strategy Teams. Although there is some scope for personal development of the materials, the key messages and content must be adhered to, and DfES regional directors monitor courses, to ensure a consistent approach to training across all LAs.

Standards Fund training courses form part of CPD for teachers, and focus on specific areas of teaching skills, methods, or new initiatives, for example, *'Teaching Spelling at Key Stage 2'* or *'The Five Day Maths Course'*.

It is recognised that this type of training is only one example of CPD training provided for teachers, but it forms the main area of work for PNS consultants in the LA used as the context for my research.

#### *The Accountability of Primary National Strategy Consultants*

PNS consultants are directly accountable to the Primary National Strategy Manager, and Directors of Children's Services. However, accountability of Children's Services extends further to the Council Members, and ultimately to the DfES. By providing a record that training has taken place, and that funding has been spent on the DfES designated focus for training, analysis of reaction evaluation forms part of the evidence produced to support PNS activity. This is monitored by Regional Directors employed by the Primary National



Strategy, by DfES through meetings with LA officials, and by Ofsted, during LA inspection.

Evidence that training has been provided is important for LA decision makers, for example, Primary National Strategy Managers, who are responsible for the provision of training at this level. It is not of such relevant concern to the consultants working as trainers. These consultants form the means by which the provision is made; they hold no responsibility for organising provision.

Therefore it may be suggested that the aspect of accountability most concerning PNS consultants relates to the effectiveness of the training, in terms of the impact delivery and content have on participants. This facet of accountability highlights for consultants the link between effectiveness and their own skills in delivering the training, a link with implications for performance management review.

Because the LA is required to provide evidence that training has had some impact on teachers, this is the area where LA and consultant needs overlap. The impact is measured in terms of pupil attainment in LA schools, through the Standard Assessment Test (SAT) scores, and is monitored by the Director of Children's Services, and DfES. The consultants play a role in impacting on teaching and the raising of attainment through the training they deliver.

Carnevale & Shulz suggest that evidence of impact using reaction evaluation is not proven (1990), because too many other variables determine whether training has resulted in impact. Reaction evaluation can however be used as a measure of participant satisfaction, indicating the level of effectiveness and usefulness of the training programme at the time the participants were experiencing it (Antheil & Casper, 1986; Guskey, 1999), and this will reflect on the effectiveness of the trainer's skill.

It is possible then for information held in reaction evaluation to provide a developmental function for trainers. The way this information relates to the trainer's own performance, and to the success of delivery of content and activities, may be key to motivating the trainer to make changes leading to more effective training.

Whilst accountability, to the LA, will call for consultants to respond to evaluation in order to make training more effective there may also be a professional desire to make future training more effective as part of their accountability to the teachers on the course. Personal satisfaction and a need to do the job as well as they can could also motivate change. But do reaction evaluations motivate PNS consultants to develop their training skills?

## RATIONALE OF THE RESEARCH

It is in the interests of both trainers and training organisations to consider the impact of feedback on future training, and the way in which feedback of all kinds can act as a stimulus to motivate improved training provision for clients. By improving the impact of the training, response to feedback acts to support the accountability of the organisations, and the professional development of the trainers working within them.

Most training organisations evaluate training with reaction evaluation. However, whilst providing valuable information related to organisational accountability, I would suggest that there are some issues surrounding reaction evaluation's potential to motivate trainers to develop their own training skills. Some of these can be explored using the quote heading this introductory chapter:

'I don't mean this unkindly, but the whole presentation style reminded me of a performance by Hinge and Brackett.'

This is a comment written by a primary teacher on a reaction evaluation completed at the end of a PNS consultant led training course. As a participant reaction it highlights the subjectivity of some reaction evaluation comments, as well as the lack of a clear explanation of the participant's view. The comment is left open to interpretation by the trainer, and rather than reflecting a desired partnership between trainer and participant, offers an image of the participant as passive in the training process.

Whilst it may be a somewhat 'extreme' example, the quote does serve to illustrate aspects of the debate related to the usefulness of reaction evaluation, and helps to reflect some of the anecdotal evidence that led to my interest in the effect this evaluation method might have on trainers' own professional development. For, although reaction evaluation is not the only feedback mechanism that trainers use, it is the only one that presents a written record of the participant response to the training. It is perhaps this permanence that can appear to imbue the evaluation with a perceived importance. In conversation with colleagues, prior to my research, I was interested that their views about reaction evaluation appeared to form a continuum, ranging from viewing reaction evaluations as irrelevant to their own development, to expressing that participant reactions hold the key to the continued improvement of training.

Organisations seeking to make effective training provision for clients, whilst providing genuine professional development opportunities for trainers, must consider the nature of all feedback systems active within the training situation. As Guskey stated ' Good evaluations provide information that is sound, meaningful and sufficiently reliable



to use in making thoughtful and responsible decisions about professional development processes and effects.' (1999, p 2). A balance must be struck between the drive for a measure of organisational accountability through feedback, and a level of clear, relevant feedback for trainers. Trainers will not change if the feedback they receive is vague or considered worthless, and by implication training organisations will also fail to improve. The aim of my research is to investigate the capacity for reaction evaluation to support this balance of professional development and organisational change.

## THE AIM OF THE RESEARCH

This research focuses on investigating the extent to which reaction evaluation is used by one group of PNS consultants to support the development of their own training skills.

It seeks first to identify the feedback factors that support PNS consultants to make changes to their training behaviour, and develops to study more closely the part reaction evaluation plays in supporting this professional development. The research investigates how often reaction evaluation is identified by these trainers as a valuable feedback factor, and then explores the importance of reaction evaluation feedback in the context of the other feedback mechanisms identified by the trainers.

Research suggests that the impact of reaction evaluation on trainers is small (Carnevale & Shulz, 1990). Through an initial study, I first investigated this suggestion in both the contexts of a Local Authority Children's Services Department and of a private training organisation, where reaction evaluation is the main method of evaluation. My initial study revealed the feedback factors influencing trainers, however my main research focused only on the LA PNS

consultants, as they formed a discrete group, influenced by shared organisational structure, commonalities of work and personal profiles.

My main study investigated the role reaction evaluation played in the development of training skills required by the PNS consultants, and the relative importance of reaction evaluation in relation to other identified feedback mechanisms.

Conclusions were drawn about the relevance of reaction evaluation for PNS consultants' own professional development, and about the extent to which training organisations may have confidence in the evaluation method stimulating the improvements in training that will support organisational accountability.

The main research question is:

### **Changing your trainers?**

**Is reaction evaluation used by Primary National Strategy consultants to support development of their training skills?**

This question is examined through a number of investigative questions:

- What feedback factors do consultants identify as supporting the development of their training skills?
- What part does reaction evaluation play as feedback to support training skills development, in relation to other feedback factors identified by consultants?
- What reasons do consultants give for positively valuing the feedback factors they use most often?
- What reasons do consultants give for querying the value of feedback factors they use less frequently or never use?



# **CHAPTER 2**

## **LITERATURE REVIEW**

## INTRODUCTION

Two key areas of theory have been the focus for the literature review related to my research questions and context. First, the study of the extent to which consultants when training directly respond to reaction evaluation by making changes to their performance leads to consideration of the *theory of evaluation*. Secondly, the personal response to feedback by PNS consultants links to *learning theory within professional work*.

This chapter reviews these key theoretical areas in relation to the personal response of consultants in their training role. I have approached this by identifying the general areas of relevance for my work within the theories and research, followed by a section developing these general areas of interest, connecting each to the personal response of consultants. Finally, I make links between both areas of research within the PNS consultants' context.

### *IDENTIFYING THE RESEARCH AREAS*

#### *Theory of evaluation*

Evaluation of training plays a key role for both trainers and training organisations, and the theory of evaluation covers a wide range of issues relating to its use. For this literature review, the focus is placed on research related to reaction evaluation (Kirkpatrick, 1959), and the impact of this evaluation method on trainers and organisations. It seeks to develop an understanding of the role reaction evaluation plays within the context of providing feedback on training, through reference to its place within the models of evaluation methods (Kirkpatrick, 1959; Holton, 1996; Holton *et al*, 2000; Preskill & Torres, 1999), and its role within the overall evaluation of a Training Cycle. It then moves to consider the research relating to its role as feedback for trainers (Dixon, 1990;

Tesluk *et al*, 1995; Tracey *et al*, 1995), and specifically for PNS consultants as trainers.

### *Learning theory within professional work*

As an individual's motivation to change professional performance lies at the centre of my research, the aspects of learning theory considered for literature review are those relating to learning within the workplace, rather than to areas of life unrelated to work.

Whilst it is apparent that aspects of the broader theories of *motivation to change*, and of *adult learning* thread through the research questions, the research given most prominence within this review relates to how individuals respond to feedback within the workplace (Eraut, 2000; Elliot, 2001). The role of feedback is as complex in the context of the professional learning cycle as it is in other areas of adult learning. It is more than simply support for information processing, having also an influence on a learner's affective and motivational processes (Narciss, 1999; Simons, 2004). Reaction evaluation, in its role as a mechanism by which participants feedback on training and trainers receive feedback, is explored in this context of information processing, affective and motivational processes.

In addition, consideration is given to whether reaction evaluation is indeed an appropriate feedback for trainers' levels of learning (Guskey, 2001), and whether the factors influencing the trainers' use, or rejection, of evaluation feedback have links with the problematic nature of feedback as communication, for example, power differentials within discourse, and emotion related to learning (Higgins, 2000).

The relationship between individual employees' learning in the workplace and organisational feedback mechanisms, such as



reaction evaluation, is also considered as a pertinent area of research (Argyris, 2000; Von Krogh, 2000). An employee's role within the organisational structure, and the organisational culture which forms this context, may influence employee response to some feedback mechanisms, particularly where feedback is considered to have more organisational than individual relevance. This may have a bearing on the perception trainers hold of reaction evaluation as a form of feedback, for much of the research defines reaction evaluation as a feedback mechanism designed for organisational audit, rather than feedback relevant to a trainer's own professional development (Antheil & Casper, 1986, Dixon, 1987).

## **THEORY OF EVALUATION**

### ***REACTION EVALUATION – THE FEEDBACK FUNCTION***

Cantalanello and Kirkpatrick (1968) referred to the evaluation forms handed to participants at the end of any training event as 'reaction evaluations'. When discussing these in terms of feedback systems and function, they considered reaction evaluations to have the potential to provide both participants and trainers with opportunities to reflect on the training event in a number of ways. For participants, reaction evaluation design was seen to prompt reflection related to their learning experience whilst on the training event, and to probe their response to a range of aspects of the event, for example, course content, course design, materials, presentation and course venue. For trainers and training organisations, information from these responses could be used to judge some level of participant satisfaction with the training event.

This early view was key in the creation of an environment where the function of reaction evaluation has been seen as fundamentally the measure of customer satisfaction, indicating the level of effectiveness and usefulness of training at the time the participants



are experiencing it (Antheil & Casper, 1986). However, whilst reaction evaluations continue to act as a key evaluation tool for many training events, over the intervening years, the capacity of reaction evaluation to fulfil this feedback function satisfactorily has generated longstanding debate amongst evaluation theorists; their research findings questioning the usefulness of reaction evaluation as a tool offering effective evaluation of courses, bringing into question the usefulness of this method for training organisations, and for trainers.

### ***REACTION EVALUATION – ITS ESTABLISHMENT AS A KEY EVALUATION METHOD***

#### ***The development of models of evaluation***

Seels and Richey (1994, p 52) call evaluation a 'commonplace human activity' and indicate how, as early as the 1930s, organisations and training practitioners designed and implemented evaluative activities to measure the value of training. Reaction evaluation, in its role as a method to take an immediate measure of the training, has maintained a place within models of evaluation for many years.

Influential in evaluation theory, Kirkpatrick placed reaction evaluation at Level 1 within his four level model of evaluation (Kirkpatrick 1968): a model whereby each level of evaluation served a different evaluative function. Reaction evaluation (Level I) centred on participant response immediately after a training event, whilst Kirkpatrick's Level II was focused on the use of pre and post course tests, designed to measure impact of training on learning. The measurement of trainee increase in job performance was Level III, and measures of improved business performance and the business returns for funding training ('Return on the Investment' (ROI)) were Level IV.

This development of a model for evaluation secured the place of the evaluation methods within it for many years as organisations began increasingly to develop evaluation of training, but Kirkpatrick's model has been criticised in later years for a number of reasons (Tamkin *et al*, 2002).

One criticism is that the development of the four level model implies a hierarchy of evaluation, from low level at Level I to the highest level at Level IV. This hierarchical view is seen to devalue Level I, reaction evaluation, as a tool placing it at the bottom of the hierarchy, whilst over valuing Level IV evaluation (Bernthal, 1995), and suggests that there is a danger of trainers placing less value on reaction evaluation responses simply because reaction evaluation is included as Level I in the hierarchy.

Although it is clear, to those who have some knowledge of evaluation models, that the functions of the evaluation methods in each of the Kirkpatrick levels are different, this knowledge may not always be shared by trainers whose personal view of evaluation comes from participant responses related to training events, rather than from the 'bigger picture' of the usefulness of evaluation in a wider organisational sense. It is also clear that the functions within the higher levels are related to successful evaluation of the lower levels, for example, to evaluate improved business performance (Level IV) gains in learning and increase in job performance (Levels II and III) must have taken place. In this way the model supports a hierarchy of evaluation activity, if not a hierarchy of value, and this knowledge is also important for organisations using evaluation methods; for the most successful evaluation would be built cohesively using all levels. Again, this level of understanding of the model may not be present for all personnel involved in the development of evaluation methods.



The concept of The Training Cycle, where the planned outcome of training delivery is improvement in learning, skill or understanding amongst participants, demands a structured and systematic evaluation capable of collecting evidence on which judgements of quality can be based (Guskey, 1999). A programme of training should be built using three types of evaluation; planning, formative and summative. Guskey suggests however that 'many educators associate evaluation with summative purposes only' (Guskey, 1999, p 7), which means that important information from planning and formative evaluation is often neglected. This lack of evaluation structure within educational professional development can lead to a confusion related to the role of reaction evaluation within evaluation models. Evidence from reaction evaluation can be argued to be formative, giving evidence of the participant experience of training not of outcome, but in reality, where this is used as the only evaluation of either programmes of professional development or training courses, it is imbued with a summative evaluation function that it is by design not capable of effectively meeting. This inappropriate use of reaction evaluation compromises the validity of the evidence it provides.

A further criticism of Kirkpatrick's model is of its failure to take account of the variables affecting learning and transfer of learning into working practices (Holton, 1996). The argument that Kirkpatrick's model is a taxonomy, with no clear definition of the causal relationships between reactions, or behaviour and learning, leads Holton to propose a variation of the model. He places emphasis on validation, learning outcomes and three learning variables, ability, motivation and environment. Subsequent models of evaluation have sought to acknowledge these wider variables (Preskill & Torres, 1999; Holton & Bates, 1998). Holton & Bates' model, called 'The Learning Transfer' system, seeks to integrate the variables of transfer, for example, peer support, opportunity to use

learning, and change resistance. Here it is acknowledged that learning and change following training is a complex issue, and that any measure of trainee satisfaction immediately following training cannot fully take into account all the variables related to learning transfer.

Kirkpatrick's model lies within the positivist tradition, in that it tries to prove that the training provided has some return to the organisation. It has been criticised for focusing on instruction of discrete skills that lead to immediate results, rather than recognising that the transfer of higher order skills is not so easily observed (Brinkeroff, 1988). And whilst later models, (Holton & Bates, 1998) have sought to develop more integration of the variables related to transfer, the principle that investment in training by an organisation should have some impact on productivity and performance of employees remains key. These developments in evaluative models expose the danger for organisations where reaction evaluation remains the main, perhaps even the only, evaluative tool used, and where reaction evaluations are considered to offer data related to subsequent improved performance of employees, for the complexity of learning transfer suggests that this is, at best, a tenuous link.

## ***REACTION EVALUATION - ITS ROLE FOR TRAINERS AND ORGANISATIONS***

### ***The measurement of learning transfer***

For organisations seeking feedback related to impact on productivity and performance, it is questionable as to whether training effectiveness can be measured by immediate participant response alone. Organisational variables can be the key to how successful learning transfer is, even when individual aspects of professional development are done correctly (Sparks, 1996). Reaction evaluation may have a role to play in the formative evaluation of training events,



but research does not suggest that a secure relationship between participant response and learning transfer can be drawn without the use of other evaluation methods.

Carnevale and Shulz (1990) state that reaction evaluations are, 'easy to collect but provide little substantive information about training's worth' (Carnevale & Shulz, 1990, p 54), and research has shown relatively little correlation between learner reactions and measures of learning, or indeed of subsequent measures of changed behaviours (Antheil & Casper 1986; Warr & Bunce, 1995). This suggests that 'satisfaction' and 'good learning' are not necessarily related, and that discomfort is sometimes essential for learning to take place.

Uncomfortable messages may need to be given through training, and the reaction of the trainees may reflect their ability to assimilate these difficult messages. Issues of needs analysis and the readiness of trainees to participate in the training may influence reaction, with negative reaction perhaps reflecting mismatch of training to participant need, rather than the ability of the content or trainer to convey the message.

Immediate response may give an impression of how well the training met the needs of the trainee, and reaction evaluation may ask for the participant to indicate the impact that they feel the training will have on their work. However, Guskey (1999) argues that whilst some evidence of participant learning can be collected on completion of a training session it seldom can be accomplished with a standardised form, and requires the criteria of successful learning to have been outlined at the beginning of the training.

Going beyond an individual participant's response about the impact of the training on their own future work, to using this to measure increased effectiveness in the workplace for the organisation appears to be very insecure, the outcome being too open to the

influence of other variables. Indeed, Browne (1997) suggests that even the use of Level II evaluation (pre and post testing) may go little further in informing the organisation of the effectiveness of training. Evidence of learning may be exhibited through pre and post training tests, but a variety of other reasons, for example, lack of opportunity or lack of peer support, may still lead to failure to transfer learning into the workplace.

Building an effective programme of evaluation requires the use of more than one evaluation tool (Browne, 1997), constructed to recognise the intervening factors that affect the transition from a developmental process to individual learning (Tamkin *et al*, 2002). It would appear from research evidence that neither positive nor negative reaction evaluation responses from participants can be taken alone as accurate indicators of learning transfer.

#### *The moderation between training motivation and learning*

Mathieu *et al* (1992) suggest that reactions should be seen as a moderator of the relationship between training motivation and learning. Less motivated trainees may learn if they have positive reactions to training, and motivated trainees may not learn if they have negative reactions. This approach to reaction evaluation challenges the view, that may exist within organisations, that reactions are the 'primary outcome' of training, and more recent research has removed reactions as the 'primary outcome' (Holton, 1996), focusing instead on a multi-dimensional approach to reaction evaluation searching to explore possible relationships between reaction, learning and transfer (Alliger *et al*, 1997; Warr *et al*, 1999).

Alliger *et al* (1997) demonstrated a modest relationship between reactions, learning and transfer when they differentiated between affective reactions (enjoyment of training) and utility reactions (the training's perceived usefulness). Warr *et al* (1999) also divided



reactions by differentiating between enjoyment of training, perception of usefulness and perceived difficulty. They found some evidence that reactions could be correlated to learning, but there was no significant relationship between reactions and behaviour change, indicating that organisations will find no evidence for changed workplace behaviour (working practice) through the use of reaction evaluation.

The recent studies considering reaction as multi-dimensional emphasise the poor design of reaction evaluation (Dixon, 1990; Morgan & Casper, 2000). Morgan and Casper (2000) have begun to experiment with evaluation methods in order to respond to the multi-dimensional nature of reaction, and, through research such as this, a link between reaction and learning may be seen as more plausible (Tracey *et al*, 2001).

However, recent research must be balanced against evidence that most organisations still use a limited range of evaluation, and that within this reaction evaluation is the most frequently used. A benchmarking survey, completed by the American Society for Training and Development, found that seventy-seven per cent of the organisations surveyed collected learner reaction, whilst thirty-eight per cent measured learning. The survey also found that only fourteen per cent measured behavioural change (Van Buren, 2001).

#### *Reaction evaluation – its usefulness to trainers*

Although organisations may be slow to accept research findings that traditional reaction evaluation gives little indication of learning, behavioural change and learning transfer, reaction evaluation may support other functions for organisations and trainers.

Evaluators continue to recognise that reaction evaluation does have intrinsic value (Browne, 1997, Tamkin *et al*, 2002), with Browne

suggesting that it is measures of learning that are actually of little use to a business organisation, whereas measurement of satisfaction, behaviour change and transfer of learning demonstrate greater links to productivity.

Reaction evaluation provides little evidence of learning, or behavioural change in the workplace because of the complexity of the variables related to learning transfer, and so it could be argued that an absence of learning transfer may not be the result of ineffective training but a result of these variables (Tesluk *et al*, 1995; Sparks, 1996). Tesluk *et al* (1995) claim that trainers cannot be accountable for training effectiveness, because although trainers may be able to influence reactions and learning criteria they have virtually no control over the behaviour and results criteria that define effectiveness. The control of this aspect, they suggest, is placed on the organisation's transfer climate, continuous learning culture and individual characteristics of the trainee, with individual trainee work attitudes being most relevant to training transfer (Tesluk *et al*, 1995, p 624). As their results show that the organisational cynicism of trainees is a powerful suppressor of change, perhaps the influence of this on reaction evaluation response should not be underestimated when considering the way in which trainers might react to immediate participant feedback.

However this research might also represent the view of a 'time lag' between training and the trainee's use of the skills learned in the workplace. Considering the importance of organisational factors, employees may begin to use skills developed in past training only when the variables that initially posed a barrier in organisational climate are removed, or when they move to a different organisation where the working environment is supportive. An understanding that there could be a 'time lag' in learning transfer might lead trainers to



view reaction evaluation in a more positive light, and may encourage them to use it to motivate change in their training.

Reaction evaluation does act to provide valuable feedback on training in providing evidence of the success or failure of training activities within the training programme, and forms part of the formative evaluation through which decision makers, including trainers, make changes to the training programme or process. Positive reactions may increase the likelihood that the trainer will continue to use the methods viewed as successful, even adapting other content in order to use methods deemed as successful by participants. Alternatively, trainers may abandon methods or activities identified by participants as less successful.

Squires (2000) proposes that the extent to which such participant satisfaction data is valuable for this formative evaluation varies depending on the focus for the training and the trainee it is aimed at. Evaluation of a training course designed to be sold to external customers will place higher value on participant satisfaction data than evaluation of an internal, mandatory safety course for employees. This suggests that trainers will be more likely to make changes to a 'fee paying' course, because of the relationship between the training and potential income. Making a 'fee paying' course more successful increases the probability of it generating more income. With a mandatory course the drive to improve may be a less because income generation is not a significant factor.

In the context of the Primary National Strategy trainers forming the sample in this study, Squire's research may have a bearing on the influence of the reaction evaluation to motivate change. If reaction evaluation has more relevance to trainers working in 'fee paying' contexts, than in contexts where training is mandatory for employees within an organisation, Primary Strategy trainers providing training

'fully funded' through DfES Standards Funding find themselves working within a culture where training is largely mandatory. Will their drive to improve training be less because further income generation is not related to training success?

*Reaction evaluation - supporting quality assurance and performance management*

Reaction evaluation may also have a function influencing the work of a trainer by providing comparison data for training organisations about trainer effectiveness (Squires, 2000), particularly where different trainers are delivering the same training programmes. Participant reaction can play a role in the monitoring of trainer performance, informing a profile of training performance. If the effectiveness of the training organisation is linked to trainer effectiveness, reaction evaluation may offer some evidence, and play a part in a performance management.

Presenting as it does only the participant view of training, it is apparent that the use of reaction evaluation for trainer performance management should be approached with some caution. Dixon (1989, p 108) claims that 'the use of participant reaction forms can cause more problems than benefits for the training function of an organisation'. He suggests that reaction evaluation, because it collects information on how participants felt about the training, may tend to raise the expectation that training should be entertaining. Trainers may therefore emphasise participant enjoyment in their training rather than the substantive content. It can be seen how later multi-dimensional models have responded to this criticism (Alliger *et al*, 1997), differentiating the affective and utility aspects of reaction. However, because this multi-dimensional approach is not yet a standard organisational method, the effect of affective reaction when considering trainer performance needs to be qualified through other forms of monitoring, for example, observation of training.

Whilst a multi-dimensional approach to reaction evaluation is not standard at an organisational level, the personal response of PNS consultants to the affective and utility aspects of participant reaction may have an influence on their own response to the reaction evaluation process. Their response to different types of reaction may have a bearing on their readiness to adapt their training as a result.

### *Reaction evaluation - motivating personal improvement*

Dixon (1989) also claims that reaction evaluation supports the notion that learning is passive rather than active, and this may also have relevance to the way in which a trainer views participant reaction as having intrinsic value as a potential motivator for improvement. Here he argues that reaction evaluation offers the participants subliminal messages about their responsibility for learning by focusing more on questions about the trainer's performance and course design than about the participant's own role in the learning. He states that, whilst it is recognised that it is the responsibility of the trainer to provide information and opportunities for learning, it is the responsibility of the participant, and not the trainer, to process that information.

A trainer's response might be to see reaction evaluation as offering only the subjective comments of participants, all of which are subject to personal value factors. This view might be supported by the trainer's belief that participants see training as passive, and a trainer may be less likely therefore to be motivated to change as a result of reaction evaluation feedback. The trainer may consider their responsibility fulfilled by the provision of the training, and consider that the responsibility to make that training of use lies firmly with the participant. To trainers holding this view, it will not matter whether reaction evaluation responses were positive or negative for, in the trainer's view, their responsibility has been met.



## ***REACTION EVALUATION INTO PRACTICE***

Much of the research of evaluation theory seems to suggest that reaction evaluation will not hold a key role in motivating trainers to change their training performance. Reaction evaluation may be viewed as too subjective on the part of participants to justify change on the part of trainers. The focus on affective rather than utility aspects of training may reinforce for trainers a feeling that participants take little responsibility for the training, seeking only to be entertained, and that participant comments are worthy of little regard. This research evidence intimates that reaction evaluation feedback will not be a powerful motivator for the development of trainers' skills, but if this is the case what form of feedback does motivate a trainer to improve?

## **FEEDBACK THEORY IN PROFESSIONAL WORK**

### ***DEFINING FEEDBACK (IN THE CONTEXT OF REACTION EVALUATION)***

Delgado and Prieto (2003) use a general definition of feedback as being 'knowledge of one's performance provided by an external agent' (Delgado & Prieto, 2003, p 73). Clearly reaction evaluation, with its focus on the trainer receiving knowledge of performance provided by the course participant, can be seen to fit this general definition of feedback. However, consideration of the research perspectives related to feedback reveal that the way in which a picture of performance may be provided by reaction evaluation, and the implicit intention for providing the feedback, require a clarification of any definition.

*The nature of feedback within behaviourist and cognitive perspectives.*

When applied to the behaviourist perspective feedback is principally concerned with reinforcing correct responses (Skinner, 1974) with an emphasis on changing behaviour to achieve desired outcomes and to meet established criteria. The information given through feedback is designed to break some habits and to reinforce others that are more desired, but this does not explain the more complex aspects of information processing that may occur within learning situations where 'human beings can make a simple process unpredictable and complicated' (Huett, 2004, p 1).

From a cognitive perspective 'feedback is regarded as a source of information necessary for verification, elaboration, concept development, and metacognitive adaptation' (Narciss, 1999, p 3). Verification will be a simple determination of the correctness of a response, whilst elaboration will be information guiding the learner to the correct response. Within education, verification may be ticking responses to show that they are correct, whilst elaboration may be the marking comments written to guide the learner. Several research studies hold that elaboration feedback is more effective than verification feedback (Bangert-Drowns, *et al*, 1991; Pridemore & Klein, 1995), however there are studies where the opposite has been found (Mason & Bruning 2001; Mory, 1992), whilst Butler and Winne (1995) found that feedback can be both internal as well as external, and required learners to be self regulating and to set goals in order for feedback to be effective. This variety of findings demonstrating how complex the study of feedback is within a social context.

*Exploring reaction evaluation within the behaviourist and cognitive perspectives.*

Reaction evaluation demonstrates well the complexity of any feedback system. Although feedback from participants may have an

emphasis on changing trainer behaviour towards a desired outcome, it is possible that each participant may hold a different view of what the desired outcome would be for themselves as learners. Such diversity of need and opinion amongst the feedback providers would make it difficult to relate reaction evaluation to the behaviourist perspective, and this would be especially true should the participant feedback oppose the intention of the training. Satisfaction imparted as feedback is not necessarily related to good learning, and discomfort is sometimes essential for learning to take place (Antheil & Casper, 1986).

Whilst there are difficulties in relating reaction evaluation to the behaviourist perspective, there are some elements of this feedback method that do link to the cognitive perspective. This is particularly so where participants grade criteria related to training, using a rating scale, thereby providing a source of information that may be construed by trainers as verification of 'right answers', and where expanded participant comments are offered about training as elaboration. Exploring the extent to which verification, elaboration, or both, lead trainers to make changes to their training is one key consideration within my research. Even whilst much of the research on feedback focuses on the study of feedback exchanges within school pupil – teacher and college student – tutor relationships, there still appear to be many generalisations that can be made when research is applied to a teacher – PNS consultant relationship.

However, although some parallels exist to link reaction evaluation as feedback into either the behaviourist or cognitive perspective, to consider that by providing feedback alone learning will take place is too simplistic an assumption, as Mory (1992) comments, 'Feedback can promote learning if it is received mindfully. However, it can also inhibit learning if it encourages mindlessness ...' (Mory, 1992, p 7). Here Mory focuses on how feedback may be badly timed, and



preempt the learner beginning a memory search to answer a particular question, thereby removing the necessity for any learning to take place. Mory also refers to studies carried out by Anderson *et al* (1971, 1972) where it was discovered that students did not use feedback in the way the researcher intended unless the use was controlled. For example, they would copy answers without thinking from feedback, with little or no processing or learning of the information.

Whilst feedback is an essential part of any theory that depicts learning as a mutual influence between learners and their environment (Bangert-Drowns *et al*, 1991), its role is not simply information processing but more complex, also having an influence on the learner's affective and motivational processes (Narciss, 1999). In order to develop an understanding of the role reaction evaluation may play in developing trainer performance the complex role feedback plays in learning needs to be explored.

### ***THE COMPLEX ROLE OF FEEDBACK IN LEARNING***

#### ***Will feedback improve performance?***

It is generally agreed that feedback is an important construct for improving instruction and performance (Clariana, *et al*, 2000; Panasuk & LeBaron 1999; Mory, 1992), but research shows that it is difficult to give a generally affirmative answer to the general question of whether feedback improves performance (Delgado & Prieto, 2003; Kluger & DeNisi, 1996).

Delgado and Prieto, (2003) in studying both instructional testing and evaluative testing, concluded that whilst participants could be provided with a knowledge of results needed to provide best score, the effect might only be shallow learning, that perhaps even acted to interfere with more elaborate learning by negatively affecting the participant's ability to perform similar but not identical tasks (Carrol &

Kay, 1988). They suggested that it is possible that feedback only has motivational benefits, but that more research would be needed to investigate how learning and motivational processes are induced by feedback in different circumstances (Delgado & Prieto, 2003, p 84).

Delgado & Prieto's (2003) work on the results of aptitude and achievement testing showed that tests of this sort are quite relevant to the self, within Western Societies, which means that individuals receiving feedback are likely to deviate attentional resources to meta-task processes, which will not improve their performance and which creates a situation where item feedback actually acts as a distracter to learning (Delago & Prieto, 2003).

This work supported that of Kluger and DeNisi (1996) who found, following a meta-analysis of over six hundred studies on feedback, that although there was significant effect for feedback, equal numbers of studies showed performance declines and no change in performance.

Such research studies demonstrate that there is no straightforward correlation between feedback and learning, and that much depends on the type of test. Significant to my own research were Delgado and Prieto's (2003) findings related to evaluative testing, which found that recipients would not learn anything during the process, only leaving the possible motivational benefits of feedback. This finding might suggest that the use of reaction evaluation as a form of feedback would have very little potential to support trainer learning, but that it could act to motivate PNS consultants to develop their training behaviour.

Significant too is the finding that some aptitude tests show a relevance to the 'self' that may provide a distracter to improving performance. Certain elements of reaction evaluations seek



participants' comments about aspects of training that will be very closely related to the 'self' of the trainer, and if such feedback acts as a distracter to improvements in performance then this would be worthy of further investigation in the context of the PNS consultants. Their response to participant comment when this comment is directed at aspects of the 'self' may have a pertinent influence on the motivational effect of the reaction evaluation on their learning.

### *Feedback as part of a learning cycle*

Since Weiner (1961) used the analogy of steering a boat, as an exemplification of the importance of the relationship between feedback and changed outcome, where the process of assessment being followed by change became a cycle of development, other learning theorists have linked feedback into cyclical models (Bangert-Drowns, *et al*, 1991; Butler & Winne, 1995; Kolb, 1996; Kulhavy & Stock, 1989).

However, whilst feedback has been seen as having an important role to play in learning cycles leading to change, the process of giving and receiving feedback within a social context is a complex and sometimes problematic form of communication (Curry, 1991; Hounsell, 1987; Ivanic *et al*, 2000). Successful learning will not just involve specific information processing, but will also be linked to constructs of motivation, maintenance and task engagement (Curry, 1991) and often to a period of critical reflection (Rogers, 1996). Here the motivation to learn or make changes is recognised, and so too is the possibility that feedback will not lead immediately to change; with the learner requiring a period of reflection before taking action on feedback and making adjustments to behaviour. Within adult learning theory, these complexities related to feedback have particular relevance, with critical reflection forming a key area of adult learning research (Brookfield, 1995) and therefore are pertinent to the study of PNS consultants as adult learners. Motivation to change as a



result of participant feedback may be connected to consultants' past experience, to their own desire to make improvements to their training, to the organisational context in which they work, to the value they place on the feedback and their attitude towards participants; demonstrating that feedback is indeed a complex form of communication and that any value placed on feedback and response to it will be defined 'through implicit assumptions about what constitutes valid knowledge and the relationships of authority that exist around the communication of these assumptions' (Lea and Street, 2000, p 45).

#### *The value of feedback and response of feedback*

For feedback to have value Guskey (2001) finds that it should be diagnostic, prescriptive and appropriate to the students' level of learning. Many studies have found that learners value feedback (Turner, 1993; Higgins *et al*, 2000), and that recipients try to make sense of feedback comments. However, within these studies it is also revealed that difficulties can exist for learners as they try to use the feedback (Ding, 1998; Hounsell, 1987; Ivanic *et al*, 2000).

The reasons for difficulties in using feedback may relate to a lack of time for reflection, or that tutors' comments are not timely enough to be of use; but a significant reason put forward is that many students are unable to understand feedback comments and interpret them incorrectly (Ding, 1998). This difficulty links to the implicit assumptions made by students and tutors related both to knowledge and to the views of authority held by these groups (Lea & Street, 2000). In addition, feedback carries messages about student identity, about their competence and even character (Ivanic *et al*, 2000), and Hounsell (1987) suggests that an understanding of feedback might fail because of the differential between the students' and tutors' conceptions; a differential generated by the students' lack of understanding of 'the assumptions about the nature of the academic

discourse underlying what is being conveyed to them' (Hounsell, 1987, p 118).

Ivanic *et al* (2000) state that 'if students are going to take their tutors' responses seriously, then it matters very much what they contain' (Ivanic *et al*, 2000, p 60), and this ability to make sense of feedback is as pertinent for PNS consultants receiving feedback from course participants as it is when applied to a student – tutor relationship. For trainers to be able to act on feedback then that feedback must match the nature of the discourse underlying the training. If this match does not exist then the feedback will be of little use in supporting their professional learning.

Tomlinson (1999) suggests that student teachers bring implicit knowledge of the classroom to their training from their own experience, and Higgins *et al* (2000) believe that the beliefs and values implicit in the discipline will be strengthened by tutor reinforcement. From this research, the assumption could be made that values between PNS consultants and the teacher participants on courses would be very similar, and therefore would assist in clarifying the meaning held within feedback. However, Lea and Street (2000) suggest that values and beliefs vary within disciplines, and Hyland (1998) suspects that this relates to particular values, beliefs and dispositions having been developed from individuals' personal experiences. This, then, might suggest that participants on courses, all of whom have different individual experiences, and who may, or may not, share similar values and beliefs, could create reaction evaluation feedback containing such differences in quality and tone that the trainer would have difficulty trying to understand the implicit discourse beneath it; for this discourse may differ from their own, or from that of the organisation which the trainer represents.

Even if the nature of the feedback is predominantly underpinned by a dominant subject specific discourse, individual values and beliefs, and the employment of other discourses, play a mediating role (Higgins *et al*, 2000), and reflections cannot be considered as either neutral or transparent (Strathern, 2000). The request for the completion of reflective aspects within reaction evaluation rests on problematic assumptions about the nature of participants and the meta-cognitive capacity for learners to reflect on their own learning, with the completion of reaction evaluation becoming an additional conceptual objective to reach containing the training discourse. Exploring the impact of this variety on the response of PNS consultants to feedback may help to develop an understanding of the nature of responses influencing their motivation for professional learning.

#### *The influence of power on feedback*

Hinett and Weeden (2000) suggest that the giving and receiving of feedback needs to be understood within the context of the tutor – student relationship, where the tutor is accepted as the authority figure. Discourses can be seen to articulate and effect social positions, as through their education, training and experience (and the official recognition of this) ‘expert’ tutors have a level of access to appropriate discourse and practices that ‘amateur’ students do not (Layder, 1998). Whilst it could be argued that power is used to protect authority over knowledge (Higgins *et al*, 2000) Layder argues that this power is not unidirectional, and that students can exercise and exert power through their own personal resources. Reflection can become ‘affecting blackmail’, where the learner looks for recognition from the trainer (Hoefflin & Frauenfelder, 2000), and may also develop the possibility of the learner opposing the trainer, hindering the self assessment process.



Within the research focused on the student – tutor relationship the issue of the ‘expert’ and the ‘amateur’ are clear, with the tutor holding power because of their more developed understanding of the academic discourse (Layder, 1998). However, the nature of the ‘expert’ within the teacher – PNS consultant relationship is perhaps less clear.

Whilst PNS consultants could be considered expert in aspects of teaching related to the Primary National Strategy; teachers could already be considered to be ‘expert’ in many aspects of teaching, because of the initial teaching training they received and their years of classroom experience. More emphasis on participatory school based research, and other forms of action research, can produce deeper understanding of classrooms, and result in teachers becoming ‘experts’ in particular arenas (Barnes, 2001), and so the power relationship between teacher and trainer becomes more complex, with the understanding of discourse having less differential between the two groups.

Feedback on training from teacher to trainer is to some extent ‘expert’ to ‘expert’ feedback, and the nature of feedback may be very linked to the teacher’s motivation for attending training, and how active a relationship with learning that teacher has had during the course. Dixon (1987) claims that reaction evaluations support the notion that learning is passive not active, offering subliminal messages that learning is something that is done to a participant. Some teachers may indeed feel that learning is being done to them, however there is also the potential for some trainers to feel that they are ‘doing the learning’ to participants as part of a default model, and to consider themselves as experts who do not need to respond to negative reaction evaluation comments from their participants (students).

Research projects focused on student feedback systems to academic departments (FDTL Project, 2003) have found that consultation on student feedback with the academic departments is proven to have beneficial effects on academic staff and their teaching (Murray, 1997). This would suggest that teachers feeding back on courses could also have beneficial effects on course development, but key to the benefits is the ownership of the feedback system, and for reaction evaluation feedback, as with student feedback, there are issues of ownership that could impede the quality of the feedback and the response of the trainer.

In the FTDL Project (2003), students sometimes felt that their contribution was form filling and that they had no involvement in the taking and implementing of decisions to make changes. This 'closing of the feedback loop' is a vital component of effective feedback systems, and one can see how participants who, having completed a reaction evaluation, have no further involvement in taking any decisions or even being informed of change, may feel that they are outside the loop, and given the subliminal message that their comments are unlikely to support change, therefore lack value.

Through my research this complex relationship between teacher and trainer will only be investigated from the trainer viewpoint, however, in unpacking the consultant perception of their 'expert' role and the teacher – trainer relationship, the influence of power in the context of PNS consultants may be clarified and then linked to the trainer motivation for professional development.

#### *The influence of emotion on feedback*

Motivation to learn is also influenced by the individual's emotional state, with emotions central to all learning (Boud and Walker, 1998, p 194). Students will be affected by what an 'expert' says about their 'amateur' knowledge (Turner, 1993), but this specific example for



one group reveals something that is inherent in social life; the 'emotion-deference system' (Scheff, 1990).

This system functions continuously but almost at an invisible level, and is a form of social control in which individuals seek the pleasure of the emotion of pride, and avoid the displeasure of shame (Scheff, 1990). Scheff (1990) argues that when an individual perceives a rejection, form of criticism or insult from another then the 'emotion – deference system' might produce a chain reaction of shame and anger. Usually this is a very brief explosion, but it can be bitter enough to generate a lasting hatred. These feelings will be as pertinent for PNS consultants on receiving negative feedback, as they are for any other group.

Another aspect of emotion that may have a part to play in consultant response to feedback will be when feedback comes to be viewed as insignificant or invalid (Hounsell, 1987). Hounsell suggests that if this happens feedback is 'not given considered attention' (Hounsell, 1987, p 117) and, whilst this may be related to the misunderstanding of the discourse, this can lock the recipient of the feedback into an emotional cycle of deprivation; a cycle which can act to widen the gap between the provider of the feedback and the recipient, reinforcing the view that feedback is invalid.

Students may become locked in an emotional cycle of deprivation (Hounsell, 1987), and consultants could react in the same way if the feedback from evaluation is considered insignificant, and is unlikely to have an effect in motivating improvement in training. In an organisational context, this may be a significant issue where reaction evaluation is the only form of 'official' feedback. The design of the evaluation may stimulate feedback considered to be valid for organisational audit, but the organisational design and function may also contribute to the view that feedback is invalid as a feedback to



individual consultants. The feedback will then be given little attention by consultants, although it may still remain a key organisational instrument for management reporting on training quality. This perhaps opens the debate as to whether, when considering aspects of policy and practice, different groups of people within the organisation actually require different forms of evidence. The combining of the different forms of evidence and different views of the trainers; for example, their emphasis on informal methods and formative assessment, as revealed in my initial study, in addition to the official reaction evaluation methods, could be key in acting to inform an organisation of a picture of the 'whole' training. This would make the organisational response more holistic, rather than focused on a selected part informed only by reaction evaluation.

Research into the way in which feedback informs professional practice within organisations further develops this aspect of reaction evaluation.

### ***FEEDBACK INTO PRACTICE***

Simons argues that it is time to reassert the value of qualitative methodologies to maximise utilisation of evaluation evidence by professional practitioners (Simons, 2004, p 1). The main argument in this assertion is that the politically favoured approach to informing decision-making using evaluation evidence fails to recognise the holistic nature of professional practice and disregards the complexity of professional decision-making and action. Practice is not an abstract concept and so calls for a qualitative rather than a quantitative consideration.

The making of moral judgements about how to act should take into account 'scientific evidence' (knowledge) where relevant and available, but this should not supplant the professional judgement and practical knowledge in practice contexts (Schwandt, 2000). Elliot

states that if educational research is to inform educational practice then it should prioritise the gathering of empirical evidence which can inform teachers' judgement about how their practices correspond with procedural values and principles that define the worthwhile process of education. Any approach that is most likely to realise this aspiration is one where teachers are actively involved in prioritising educational aims, in defining what is to count as relevant evidence of the extent to which these are realised and in interpreting the practical significance for them (Elliot, 2001, p 565). It could be argued that reaction evaluation is only one small part of this bigger process of evidence collection for trainers leading to effective practice, and again highlights a possible need, within organisational contexts, for different evidence to be collected for different people in order both for evaluation itself to be effective, and to support change towards more effective practice.

This view is far from the linear, rational relationship often assumed between evaluation knowledge and decision making in the evidence based policy arena (Simons, 2004), and includes theory of the codified, cultural and personal knowledge required by professional to make decisions (Eraut, 2000), plus their experience, which has resulted in a wealth of tacit knowledge (Polyani, 1958). A practitioner may have to respond to changes quickly, but this will be informed by previous judgements and practical theories of what is appropriate in specific contexts. Whether called 'natural wisdom' (Berlin, 1996) or 'practical knowledge and wisdom' (Schwandt, 2000) this process of coming to understand and make moral judgements in particular circumstances is crucial to the enhancement of professional practice, and will be as evident amongst PNS consultants as amongst other professional groups.

Simons (2004) stresses the importance of motivation and values in the transfer of evaluation evidence into practice. 'Individual

professionals or groups must want to see the results and see the relevance of them to their particular setting.' (Simons, 2004, p 16), and individuals may value different kinds of knowledge to inform their action, with different evidence being sought or required to answer different questions.

'Practice setting and the complexity of the professional judgements they entail call for a range of evaluation evidence and an awareness that whether evidence of whatever kind is utilised is a matter of values, personal preference, professional judgement and 'practical knowledge or wisdom' (Simons, 2004, p 18). How far do PNS consultants recognise themselves in this view of how reaction evaluation could form part of their decision making to improve practice; and how does their perception of reaction evaluation reflect their view of the importance placed on personal preference, professional judgement and practical knowledge by the training organisation?

## REACTION EVALUATION AS PRACTICE FEEDBACK FOR PRIMARY STRATEGY CONSULTANTS.

Simon's view, that the use of any evidence by professionals to inform practice is 'a matter of values, personal preference, professional judgement and practical knowledge or wisdom' (Simons, 2004, p 18), is one that can be applied when considering how reaction evaluation may be used by PNS consultants as evidence to support development of their professional practice. Central to this consideration has to be the awareness that reaction evaluation is evidence only of the course participant view following one particular training event, and that this view is being applied through the trainers' own system of values, knowledge, judgement and experience as a professional.



Issues of shared discourse in training and feedback, and of the ownership of both training and the evaluation system may all have an influence on the way in which PNS consultants view reaction evaluation as feedback for professional practice. These issues form a thread through both the research into evaluation theory and that of feedback in the workplace.

### *ISSUES OF SHARED DISCOURSE IN REACTION EVALUATION*

Effectiveness of feedback to generate change has been seen to link to the importance of a shared discourse between the feedback giver and recipient (Ding, 1998; Hounsell, 1987).

Discourse related to reaction evaluation can be viewed on a number of levels and each may have an influence on the way in which the feedback has potential to engender change in the trainer as recipient.

#### *Shared discourse of course objectives*

Underlying any response in reaction evaluation must be the shared discourse of the objectives that the course was designed to address. It cannot be assumed that all teachers will share the same understanding of the training objectives (Tomlinson, 1999), or of the discourse used to present these. A difference in this discourse between trainer and participant, even if it is only between a number of participants, is likely to have a negative effect on the trainers' motivation to use the feedback given in order to further develop training.

#### *The nature of reaction evaluation: a challenge to shared discourse?*

The discourse of the reaction evaluation itself, namely the wording of the evaluation questions, also needs to be a shared discourse.

Participants need to understand what the questions are asking, and be able to articulate an evaluative response. It could be argued that

the nature of reaction evaluation creates a potential break in the discourse between participant and trainer here.

At an individual level, each reaction evaluation discourse will reflect the individual experiences of that course participant. The nature of the reaction evaluation, collecting as it does information on how participants felt about training, does not prompt a discourse from any other than this individual view. There is a likelihood that some participants may respond to the discourse with a view of what might be helpful to others, including the trainer, but a potential outcome of reaction evaluation responses will be that there are as many responses as there are participants on the course. At a collective level, each reaction evaluation will express an individual view, creating a difficulty for the consultant in finding any general pattern in the discourse of those present on the course. In the face of no general pattern of comment, what is the likelihood that a consultant will adapt training as a professional response to comments from perhaps at best a portion of the audience? How significant a portion of the audience would this have to be to prompt change, and what other factors would influence whether there would be change or not?

*Design of reaction evaluation: a challenge to shared discourse?*

To support information processing, reaction evaluation design focuses largely on collecting participant viewpoints through a series of ratings scales related to aspects of the course, with open-ended response questions for additional comments.

Within feedback theory, the use of these ratings could be viewed as a means of verification, and it could be suggested that the ratings collated from reaction evaluation will give an indication of the 'correctness' of that training in terms of meeting the participants' needs. However, the criteria against which the rating levels are decided on by participants would need to be shared for the

information processed through the ratings to have any real validity, and it is this development of shared criteria that is missing from the reaction evaluation system; based as it is on individual response, and perception of what the ratings mean in relation to the training experience that individual has received. This lack of shared discourse opens debate as to the validity of the grade received from ratings scales on reaction evaluation. Is this likely to influence the way in which consultants respond to the grades received?

Furthermore, Dixon (1987) suggests that reaction evaluation design by focusing more on questions about the trainer's performance and course design offered subliminal messages to the participant about their role in the training experience, linking the design of the reaction evaluation into the theme of ownership of training and the evaluation system.

## *ISSUES OF OWNERSHIP IN REACTION EVALUATION*

### *The influence of power*

Layder (1998) suggests that although tutors hold power in learning situations between student - tutors, because of their more developed understanding of the academic discourse, this power is not unidirectional and he suggests that students can exercise power through their own personal resources. Could reaction evaluation be one resource through which teachers as students can exercise this power, and how might this affect the way in which consultants use the evaluations to inform professional practice?

Reaction evaluation provides a vehicle through which the participants can express their affective reactions about the training, exerting their power to feedback to the trainer. It has been suggested that this measure of satisfaction is important to trainers and organisations (Browne, 1997), and some work has been done to differentiate affective and utility reactions to training, which through design



developed the discourse of evaluation for participants, and provided some evidence, through utility reactions, of reactions being correlated to participant learning (Alliger *et al*, 1997; Warr *et al*, 1999). However, there is a view that trainers are not accountable for training effectiveness (Tesluk *et al*, 1995). This holds that trainers may be able to influence reactions and learning criteria, but will have little control over the future behaviour of participants and that future behaviour ultimately defines training effectiveness. Effective training that was 'uncomfortable' for participants, could be reflected in reaction evaluation and appear to exert participant power through the expression of their satisfaction, but it could be argued that, because this feedback fails to be a clear indication of the effectiveness of training, the power differential remains with the trainer due to their more developed professional understanding of the discourse and objectives of training.

Consultants may hold that reaction evaluation is useful for measuring the effectiveness of training methods and techniques, and this may lead to them paying little attention to reaction evaluation when considering how best to improve training. Consultants may express security in their understanding of the nature of the objectives of specific training events, and the training methods they employ, and view that as a result of professional experience, regardless of participant response, the power differential remains with the consultant.

Here a link may be seen to Dixon's (1987) views relating to the emphasis within reaction evaluation on trainer performance, which creates a focus on the participants' affective reaction to training, rather than engaging them in a discourse focused on the training related to their own learning. This bridges the issues of power and those issues central to discussion of where responsibility lays for

learning during training. Is it with the consultant, the participant, or as an active partnership between them?

### *Responsibility for learning.*

If participants are offered subliminal messages that the focus of reaction evaluation is on trainer performance and not on *their* role in the learning, then the concept of learning being an active partnership between participant and trainer is compromised (Dixon, 1987). Dixon (1987) believes that trainers have the responsibility to train, but that participants have the responsibility to process the training, and that reaction evaluation does not support this relationship. If this view is one shared by consultants then their use of reaction evaluation is likely to be limited, for they will view their professional responsibility fulfilled by the action of training. The reaction evaluation responses will not form secure evidence to inform professional practice, as this evidence will be seen to relate more to participant responsibility as part of the training / learning process.

In feedback theory this issue of responsibility for training is reflected in aspects of the theory related to the role emotion plays for a recipient of feedback. Scheff (1990) argues that criticism can result in the 'emotion-deference' system producing reactions of shame that can be brief, or can generate a lasting hatred. If reaction evaluation design is largely focused on the consultant, is the potential for emotional reaction heightened? Where this feedback is negative, will the emotional reaction lead to the feedback being increasingly considered to be invalid?

### *Relevance of roles*

Considering feedback in relation to the roles that protagonists in the training play, also reveals aspects related to ownership of both feedback and training that may have relevance when considering the

value of reaction evaluation as a training development tool for consultants.

Participants completing feedback may see this opportunity to document their satisfaction related to the training experience as a largely inconsequential activity. Whilst they have been offered the chance to feedback, they may consider that the feedback begins and ends with the completion of the evaluation form, and that, because there is no participant involvement in any 'change making' decision process following feedback, they are participating only in a form filling exercise (FTDL, 2003). This belief may lead to an intensifying of any concerns participants may hold that changes in training are unlikely to happen as a result of reaction evaluation, possibly heightening the responses participants make related to their personal satisfaction with training, lessening the potential for less personal, more evaluative feedback responses, and increasing the perceived distance between trainer and participant in the learning process. A distance that may in turn reinforce passive learning.

It is also possible that consultants may hold views, in relation to the relevance of reaction evaluation for their role, that are tempered by their beliefs that the feedback has a relevance that is predominantly organisational. Whilst research suggests that to use reaction evaluation for quality assurance of trainers should be viewed with caution (Dixon, 1987), the predominance of reaction evaluation, as the only form of training feedback used by organisations, may reinforce belief within trainers that organisational interest in training centres largely around participant satisfaction. That this is used as a measure of training and trainer effectiveness, and that the responsibility of participants in the training process is not viewed as of importance by the organisation, may influence the way in which consultants respond to feedback. A possible scenario might be that consultants emphasise entertainment within their training in order to



achieve high participant satisfaction, but for some consultants the fact that participant responsibility is not a feature of the evaluation will heighten their belief that as training effectiveness is not measured by participant satisfaction the reaction evaluation responses will have little credibility as a measure of the effectiveness of the training they provided. How much will the consultants' views of themselves as 'experts' providing effective training for participants, influence the use they make of reaction evaluation?

The fact that learning is also not always about immediate change also has a relevance here, for organisations, through reaction evaluation, are measuring satisfaction immediately following training, giving no opportunity to develop an understanding of the impact of that training following a period of critical reflection, an aspect considered important in adult learning. Do consultants view this inability of reaction evaluation as another weakness of the organisational system, and does this influence their view of participant response? Might consultants consider that participant response on reaction evaluation is immediate 'gut reaction', remaining confident that training was appropriate. For, whilst not documented on reaction evaluation, changes to teachers' performance may occur following critical reflection.

## CONCLUSION

My literature review demonstrates the complex, inter-related nature of evaluation and feedback theory, and it must be accepted that research evidence related to any one evaluation method can only inform part of this wider web of connections. It is also accepted that areas of theory other than evaluation and feedback will also have influence, for example, theory of motivation.

In attempting to develop an understanding of how reaction evaluation, as one type of feedback within this complex picture, may inform and influence a particular group of individuals, and the development of their training skills, I have tried to reference the key areas of research related to their situation and response to evaluation. The potential influence of some other areas of research on the findings is explored in the final chapter of the thesis.

# **CHAPTER 3**

## **METHODOLOGY**



## INTRODUCTION

This chapter sets out to place my research within the cannon of educational research methodology, and to explain the research strategy and choice of data collection instruments.

It also seeks to develop the link between the initial study, and the main research, by making reference to the way in which the initial study data collection instruments and findings informed the development of the research procedure.

Finally this chapter addresses some of the ethical issues relevant to this study.

## RESEARCH METHODOLOGY

### *THE CONTEXT OF EDUCATIONAL RESEARCH METHODOLOGY*

Cohen et al (2003) state that ‘... research is concerned with understanding the world and this is informed by how we view our worlds, what we take understanding to be, and what we see as the purposes of understanding.’ (Cohen *et al*, 2003, p3)

This search for understanding has led to educational research absorbing both the traditional view, concerned with discovering laws by which both individual and social behaviour may be regulated and determined, and the interpretive view, where studies emphasise how individuals differ from inanimate natural phenomena and from each other, and is concerned with developing a rigour of description and explanation leading to understanding.

These differing views of interpreting social reality have led to some researchers investigating human behaviour using positivist methods,

related to scientific enquiry, where knowledge is based upon observation and experiment, and to others using naturalistic, interpretive approaches, striving to understand and interpret the world in terms of its actors. Whilst positivist approaches tend to use quantitative data collection instruments, such as questionnaires, creating data to be measured and analysed statistically, interpretive approaches tend to use qualitative data collection instruments, such as interviews, biographies and case studies. These create data reflecting the subjects' interpretation of events and contexts, and are often presented as 'thick descriptions' (Geertz, 1973, p 10) emphasising the fact that many events cannot be treated in a generalised way through the use of statistics.

#### *PLACING THE RESEARCH WITHIN THE WIDER METHODOLOGICAL CONTEXT*

When considering my research aim it was apparent that an investigation of the use consultants made of reaction evaluation could have been researched through a quantitative survey, thereby generating data on whether reaction evaluations are used by consultants to support improvement in their training skills, or whether they are not.

However, either a positive or negative response to questioning an individual's use of any item will mask many underlying factors influencing their response. I concluded that conducting a quantitative survey, if constructed to probe into reasons for use, might offer some explanation for either use or non-use, but Schofield's view (1993) of the goal of qualitative research being 'to describe a specific group in fine detail and to explain the patterns that exist ... not to discover general laws of human behaviour.' (Schofield, 1993, p 92) began to broaden my thinking. It became clear that the place for this research was also within the interpretive paradigm, as my research group were a relatively small group of consultants, working within my own

working context, and my purpose in developing an understanding of the value of reaction evaluation for these individuals meant that I wanted to get further under the skin of their use of reaction evaluation, and to be able to understand how variables such as experience, values and attitudes might influence use.

So, whilst this research could be approached using quantitative methods directed at analysing the relationships between selected factors, the potential to simplify the reasons underlying the consultants' response led to me developing a research programme that had the capacity to quantify use of reaction evaluation, but which included the facility to investigate individual interpretations underlying usage. This was achieved by conducting semi-structured interviews with consultants to generate 'thick description', a method that recognised my role within the working context, as it created 'an interchange of views ... on a topic of mutual interest' (Kvale, 1996, p 14).

Consequently, my methodological choices have drawn from both paradigms in order to build a research programme that has the ability to reach into the heart of consultants' experience through a mixed methods approach. In order to research both actions and reasons meaningfully, I developed a sequential design (Morgan, 1998) whereby qualitative methods, in the initial study, were followed by quantitative methods, within the main research, and where findings from the different approaches were integrated to reveal a depth of understanding related to consultant use of reaction evaluation.

I was aware that in doing this I was devising 'a general orientation to the conduct of social research' (Bryman, 2001, p 20) where combining the methods offered the chance to answer my research questions more fully. Bryman (2001) discusses how using mixed



methods not only supports the triangulation and the corroboration of research results, but has been seen to support the elaboration or expansion on hypotheses, the initiating of hypotheses, or generation of complementarity or contradictions. He indicates how the mixed methods approach has become 'increasingly common – unexceptional and unremarkable in recent years' (Bryman, 2006, p 97), but recognises that whilst, for some researchers, it has become a third way, alongside quantitative and qualitative methods, there is unease expressed by some about the 'whatever works' position underpinning the method (Buchanan, 1992; Pawson & Tilly, 1997). Mason argues that whilst mixing methods should be seen as a good feature of research the logic for mixing it is not always expressed as readily as the sentiment for choosing the method (Mason, 2006).

My own research position was certainly influenced by the desire to do 'whatever worked' to gain as complete an understanding of consultant behaviour as I could, but I did not come to my methodological stance lightly as is perhaps implied within the phrase 'whatever works'. For me mixed methods offered the opportunity to enhance my interpretation of the findings. The disadvantages of over simplification with a purely quantitative approach could be balanced with qualitative insights to expand on my understanding of the reality of consultants' use of reaction evaluation.

### *GENERATING THEORY*

As the research aims sought to develop an understanding of how individual trainers differed in the use of reaction evaluation, the issue of the purpose of the research needed to be addressed. Interpretive researchers set out to understand how individuals interpret the world, and from the interpretations theory emerges, 'grounded' on the data generated by the research (Glaser and Strauss, 1967).

When considering the purpose of my research, it became apparent that the research was not aimed at generating a theory of the way in which any particular consultant, or consultants with a particular profile, would use reaction evaluation as a motivator for training skill improvement. What it did aim to do was to provide a picture of the way in which consultants use participant response feedback, focusing on reaction evaluation, in order to inform their training skill development; moving towards making some generalisations about how trainers in other contexts may display similar traits related to its use.

Furthermore, through investigating the evaluation of training, my research has the potential to 'spotlight' part of the broader picture of the way in which professional development for consultants as trainers is supported and organised within an organisation possessing a training function. Whilst an investigation of consultant response to reaction evaluation provides information of a specific response to one form of feedback, an understanding of this aspect can promote further discussion of how the CPD consultants receive from their organisation, to support the development of their training skills, may be best informed by the factors consultants themselves identify as important.

## THE DEVELOPMENT OF THE RESEARCH SEQUENCE

Through this section of the chapter I document the way in which my research methodology has evolved.

I explain the way in which the initial study was originally planned to link to and inform the main research. Then I move to highlight the reality of the impact of the initial study, and the subsequent re-designing of the main research, prompted by the initial study findings and the methodological issues it raised.

The final section of the chapter focuses on the main study, developing the issues related to the choice of data collection instruments and methods of data analysis.

## THE INITIAL STUDY

### *THE ROLE OF THE INITIAL STUDY*

The initial study was designed to pilot a semi-structured interview schedule with a sample group of six consultants, and I intended it to be the trial for future research in the main study. The aims of the initial study were to test the feasibility of the interview method, allow for modifications to the interview schedule, and make some analysis of findings, with a view to semi-structured interviews being the main research method with a larger group of consultants during the main study. The original research design is developed in Table 3.1.



<p><b><u>Initial Study – Data Collection (pilot)</u></b></p> <p>Semi-structured interviews, with a sample of six trainers. (Three PNS trainers, and three trainers working for an independent training organisation.)</p> <p>Interview focus: gathering data about the extent to which reaction evaluation and other feedback factors are used to support development of trainer training skills.</p>
<p><b><u>Initial Study – Data Analysis and Conclusions (pilot)</u></b></p> <p>Analyse semi-structured interview data to determine</p> <ul style="list-style-type: none"> <li>a) how central reaction evaluation was in supporting training skill development of this sample group;</li> <li>b) how organisational structure influenced the use trainers made of reaction evaluation.</li> </ul> <p>Develop a hypothesis to test in the main study with a larger sample.</p>
<p><b><u>Main Study – Data Collection</u></b></p> <p>Semi-structured interviews, with a sample of ten trainers. (Five PNS trainers, and five trainers working for an independent training organisation.)</p> <p>Interview focus: gathering data about the extent to which reaction evaluation and other feedback factors are used to support development of trainer training skills.</p>
<p><b><u>Main Study – Data Analysis and Conclusions</u></b></p> <p>Analyse semi-structured interview data to test the hypothesis generated by the Initial Study.</p> <p>Make generalisations about the way in which trainers from different organisations use reaction evaluation.</p>

**Table 3.1    The Original Research Design**

## **THE METHODOLOGY OF THE INITIAL STUDY**

### ***Early pitfalls.***

The design of the initial study was developed to provide data to explore the research question:

***Changing your trainers! What role does reaction evaluation play in the development of a trainer's skill?***

and I planned to do this by researching answers to the following questions:

- What motivational factors do consultants identify as stimulus for the development of training skills?
- What part does reaction evaluation play as a factor motivating the development of training skills, in relation to other motivational factors identified by consultants?
- What reasons do consultants give for positively valuing the motivating factors they identify?

In seeking to answer the research question, and develop an understanding of consultant response to reaction evaluation, I first considered using a questionnaire. The intention behind this was to canvas a number of consultants, asking if they used reaction evaluation to support the development of their training skills, and what influence this had on them. From the questionnaire results, I planned to select a sample of consultants, some who did use reaction evaluation and others who did not. The sample would then be interviewed through semi-structured interview, to develop a depth of understanding related to their reasons for using or rejecting reaction evaluation as a feedback factor to inform their own training skills development.

However, I rejected this approach having considered factors related to the development of questionnaires and the potential pitfalls that may be presented by this method, particularly, the reliability of the

information collected by the questionnaire. Certainly the frequency of use of reaction evaluation could be measured by the sample answering either positively or negatively to a question asking about its use, but in asking direct and 'leading' questions about one type of training feedback I felt unable to be secure that the answers given had not been influenced by respondent concerns about gaining approval or disapproval by answering in a particular way. Just by singling reaction evaluation out as a questionnaire focus I could already be seen to be hinting at its importance, and introducing researcher bias that might easily be picked up by respondents and so threaten the overall validity of the data. Consequently, if this data supported the selection of the interview sample and was biased, then the information gained from the semi-structured interviews could reinforce this bias, further threatening validity of the data.

#### *Moving on with the initial study*

Cohen, in comparing questionnaires and interview, points out that one advantage of interview is that 'it allows for greater depth than is the case with other methods of data collection.' (Cohen *et al*, 2000, p 269). On reflecting upon the need for consultants to be encouraged to consider reaction evaluation in depth, I moved away from a pluralist approach to taking the decision that the research would sit securely in the qualitative paradigm. I decided to make semi-structured interview the main form of data collection, believing that this would enable me to facilitate respondents to consider the way they used reaction evaluation. I hoped that this discussion would also prompt respondents to make comparisons between reaction evaluation and other methods of feedback.

Acting as the 'human instrument' I designed an interview schedule aimed to gather information on to what extent reaction evaluation, and other feedback factors, motivated consultants to consider developing their training skills. Providing some structure through the



interview schedule meant that all respondents were focused on the same areas of questioning, but there was opportunity for me to pursue relevant threads of discussion with individuals.

My role in the interviews was important in enabling response to environmental cues, related to the consultants' relationship with the organisational structures and influences. It also enabled exploration of unexpected responses, and assisted me in feeling confident that the consultants had been able to explore the issues fully.

### *The Initial Study Interviews*

Five trainers took part in the initial study, three were PNS consultants, from a Local Authority, and two were trainers from an independent training company. (A third trainer from the independent training company had to withdraw from the interviews due to work commitments.)

The sample was selected to include trainers of both genders. The trainers' career history and status within the organisation were also considered, in order to achieve a breadth and range of training experience amongst the sample. A sample profile is presented as Appendix 1.

The interviews all took place at the trainers' workplaces, and lasted forty-five minutes. The interviews were recorded, but some field notes were completed to compliment the audio recording. This was an attempt to capture some of the non-verbal aspects of the interview in response to Mischler's comment that visual and non-verbal aspects are filtered out of the interview (Mischler, 1986).

### *The interview schedule design*

I made an intentional decision, as part of the interview design, not to reveal that the aim of the research question was to investigate

reaction evaluation's role as a support for development of the trainers' training skills. Whilst there are ethical issues related to a failure to disclose purpose (Cohen, *et al*, 2000, p 63), two potential problems informed this decision.

Firstly, there was the possibility that if the interview respondents knew that reaction evaluation was the study focus they would be prompted to highlight this more than other factors, and that this highlighting might be disproportionate to the actual use made of reaction evaluation to support training skill development.

Secondly, there was the danger that respondents might react to reaction evaluation more favourably in the interview situation than in reality; their knowledge that it was the central research theme leading to a desire to present a positive perspective to the interviewer.

Kimmel (1988) argues that few researchers feel that they can do without deception entirely. To reveal my aim at this stage of the research could have potentially increased the bias in the findings, and threatened the validity of the conclusions. As the respondents were aware from the outset, on agreeing to be interviewed, that the discussion was focused on the use of feedback to support training skills they were clear about the overall intention of the research. I did not feel that the level of deception in hiding the focus on reaction evaluation was one that compromised the respondents, or our relationship.

Having weighed the 'costs/benefits ratio', as it is expressed by Cohen *et al* (2000, p 63), I made the decision to work through the interview from a general perspective to support the generation of more comparative data between feedback methods, as well as enabling a focus on reaction evaluation. Discussing the factors that

supported respondents to change their training behaviour was planned into the design to support analysis of the relative values of reaction evaluation and other feedback factors in supporting trainers for this purpose.

### *The interview questions*

The initial questions were planned to locate the respondent within the context of the research area and to put the respondent at their ease (Patton, 1980). These questions related to the length of time they had been training adults, any other adult training experience they had, and what were the most challenging, and most rewarding, aspects of training adults.

The questions then moved to consider which feedback mechanisms and motivational factors the respondent used and valued to support their own development of training skill. This part of the interview was designed to allow for elaboration on points related to their own context and background, but was structured so that the 'what' questions preceded the more searching 'why' questions (Cohen *et al*, 2000, p 280). My prompting or probing questions acting to clarify responses, for example, prompting respondents to give actual examples of changes they had made to course design following reaction evaluation comments.

The final interview stage was to recap on the feedback mechanisms and motivational factors identified by the respondent, and to ask them to rank the factors in order of value.

The initial study interview schedule is included as Appendix 2.



### ***SO WHERE DID THE INITIAL STUDY LEAD?***

The initial study played a central role as it trialled the research methods, and the findings, developed in Chapter 4, offered links to the initial literature review, and also suggested new themes to be examined in more depth, for example, the 'expert – learner' relationship between the trainer and participant.

The findings provided an indication that feedback was considered by trainers to be supportive for their training skill development, and these findings did offer some potential for further testing through the research in the main study.

However, whilst secure that the initial study could act to inform the main study, my experience in conducting the initial research led me to re-evaluate the approach I had taken to investigating the research question. My re-evaluation emphasised that I needed to address some features of the research design in order to strengthen the methodology. It was becoming clear that if I wanted to develop the main study, re-running the initial study with a larger group of trainers would not be the best approach. The next section of this chapter develops the way in which the initial study informed my subsequent methodological choices.

### **HOW THE MAIN RESEARCH WAS INFORMED BY THE INITIAL STUDY**

#### ***REDEFINING THE RESEARCH QUESTION***

Following the initial study, I re-considered the wording of the research question. I reflected that ***Changing your trainers! What***

***role does reaction evaluation play in the development of a trainer's skill?*** needed a tighter focus.

Exploring the 'role' reaction evaluation played offered the chance to investigate the nature of training skill development and the relationships between the factors that supported it, but I felt that the question was too broad to offer an insight, within the limitations of my thesis, into the specific usefulness of reaction evaluation for trainers.

I decided that in order to create research with the potential to explore the use of reaction evaluation by trainers, within the context of it being used as an organisational evaluation tool, and to inform organisational support for trainers' skill development, I needed to centre the research more tightly on answering the question of whether trainers used reaction evaluation to support their own skills' development.

The re-worded research question moved to do this:

***Changing your trainers? Is reaction evaluation used by Primary National Strategy consultants to support development of their training skills?***

The question retained the emphasis on investigating the way in which reaction evaluation might support training accountability for an organisation, through its use by consultants as feedback to inform the part of their professional development related to training skills. The term 'consultant' rather than 'trainer' is used throughout this thesis when referring to my specific sample group, and the term 'trainer' is used when I make reference to trainers in general.

## ***REDEFINING THE RESEARCH CONTEXT***

Initially, part of my research intention had been to develop a comparative thread, offering insights into the differences between the

independent training company and the Local Authority organisational contexts. The re-wording of the research question already gives a clue through the particular reference to Primary Strategy consultants, that following the initial study I decided to abandon this comparative aspect.

I felt that, to be clear about the way in which an organisation can support trainers in their own professional development, it would be best to concentrate the research within one context. The LA was selected as the context for the main research as it offered the chance to investigate my own working situation. Whilst this presented the challenge of being an 'insider' researcher, I felt that the interpretation of the research findings would be more relevant applied to my familiar working context, and would offer more potential for the findings to be used to inform organisational change.

### *DEVELOPING THE MAIN STUDY METHODOLOGY*

Whilst using semi-structured interviews in the initial study had provided data related to the feedback factors identified as supportive of trainers' own professional development, I felt that using this method alone in the main study would present some problems to data collection.

My concerns were that semi-structured interviews, in the form in which they were presented for the initial study were:

- unable to investigate the feedback factors trainers did not use, without leading respondents, because the interview schedule was focused entirely on the trainers' positive use of feedback factors;
- i) reliant on the respondent's own understanding of what constituted a feedback factor, ii) reliant on the respondent's own understanding of what constituted training skills. This



potential lack of a shared language could threaten validity of data collected;

- unable to give a quantifiable indication of the frequency of use of any of the feedback factors. The ranking process used during the initial study, whilst supporting trainers to prioritise feedback factors, lacked rigour for comparison, because the ranking was based on the subjective views of the trainers and what constituted 'value'.

In addition to these problems, for a larger group of trainers, semi-structured interviews would be a time consuming method of data collection. It was clear that the interviews would need to be carried out with a sample of trainers, and that issues of sample selection would need to be considered.

However, in attempting to address these areas of concern, the initial study methodology, combined with its findings, worked to inform the methodology of the main study in a number of ways.

#### *Developing a shared understanding of feedback factors*

The list of feedback factors developed from analysis of the initial study interviews was key to the design of the main research sequence. This list identified feedback factors that trainers themselves viewed as important in supporting the development of their training skills, and could be used to form the basis for creating a shared understanding of the feedback factors PNS consultants considered important for this purpose.

The initial study sample identified a total of ten factors, and of these four were identified by all five of the initial study respondents.

However, a first step, before using the feedback list as the basis for further research, was to complete a validation process, particularly because the list was created following interviews with only five

trainers, and also because two of the ten factors were only identified by a single respondent.

#### *Validation of the feedback factor list*

Validation was arranged by presenting the feedback list to a group of fifty Primary National Strategy consultants, who were not part of the LA acting as the main context for research. The context for the validation process was a regional training meeting, organised by DfES, and the validation activity formed part of the day's programme.

The consultants were asked to consider the list of feedback factors and what supported them to improve training. They were then asked to add to the list any significant personal motivating factors, should these not be present on the list.

This validation led to one factor being added to the feedback list generated from the initial study. Other factors were suggested during the validation, but consideration of the wording of these revealed the 'additional factors' to be variants of the factors already listed, and so these were not added to the feedback list as additional factors. The revised feedback list can be found in Appendix 3.

The sub-divisions developed to group the factors during the initial study were retained and used to support analysis of the main study data.

#### *Agreeing a 'common language' related to training skills.*

Studies relating to attempts to document teachers' professional knowledge (Loughran et al, 2003; Mitchell, 1999), indicate that representing and communicating teacher knowledge are 'fraught with problems as the constructs and vocabulary that are developed by a group of teacher researchers may commonly be jargon to others.' (Loughran et al, 2003, p.855).

As I reflected on how difficult it had sometimes been to code responses generated in the initial study interviews, and how responses suggested that the term 'training skills' had been interpreted differently by different respondents, it became clear that a shared language related to training skills would need to be developed amongst the consultants before further research began. This need was perhaps magnified by the fact that training was not the core activity for the PNS consultants, although it did account for approximately thirty percent of their working activity.

The development of a shared language was undertaken as an activity within a team day where all consultants potentially involved in the research were present. A list of training skills was presented to the group, sourced from the Institute of Training and Occupational Learning certificate level competencies. Consultants were asked to discuss the statements in pairs and to decide which training skills listed were part of the training role they themselves played. It was emphasised to the consultants that this activity should not be influenced by any perception of whether they performed well in a particular skill or not, merely on whether the skill was required in their role.

Following paired discussion the group shared their understanding of the training skills involved, clarified definitions and reached an agreement on the training skills needed within their specific training role.

#### *The development of the main study sample*

The initial study, in providing the feedback factor list, enabled me to begin to clarify the selection of a sample for interview during the main



study, my aim being to select a sample of consultants who varied in the value they placed on reaction evaluation as a feedback factor.

I decided to ask consultants to sort the feedback factors from the list into three categories, and so collect quantitative data about how frequently reaction evaluation was used as a feedback factor within the larger research group.

I then based my selection of the smaller interview sample on choosing consultants who exhibited different profiles of the use they made of reaction evaluation. Selecting interview respondents across the range of use gave an opportunity to more legitimately investigate the reasons for both use and non-use of reaction evaluation among consultants than had been possible during the initial study, and indeed than would have been possible if semi-structured interviews had continued to form the main data collection method for the main study.

## THE DEVELOPMENT OF THE MAIN STUDY

The development of the main study methodology had many elements of a return to the rejected pluralistic approach I had originally planned for the initial study! Again I found myself considering the use of a quantitative data collection method, supported by the collection of qualitative data. What differed this time was the way in which my experience of the initial study had enabled me to construct a methodology that offered a much more controlled approach to both types of data collection.

The resulting research sequence is shown in Table 3.2 and further exemplified in this section of the chapter.

<b>Activity</b>	<b>Context</b>	<b>Purpose</b>
Validation of the feedback factor list generated during the Initial Study.	50+ PNS consultants (working in LAs other than the one central to the study) Individual validation of list	To check the validity of the feedback list generated by a small sample of trainers during semi-structured interview.
Agreement of the 'training skills' required for PNS training	10 PNS consultants in focus LA Paired and group discussion	To clarify a definition of training skills to support validity of both quantitative and qualitative data collection
Quantitative data collection Feedback factors sorted i) to indicate frequency of use ii) to demonstrate how frequently used feedback factors support training skills	10 PNS consultants in focus LA Individual sorting activity	To collect data on i) the frequency of reaction evaluation use ii) the frequency with which reaction evaluation is used to support particular training skills
Analysis of quantitative data		To develop understanding of frequency of reaction evaluation use. To support interview sample selection
Qualitative data collection Semi-structured interviews	5 PNS consultant selected relative to frequency of reaction evaluation use	To develop 'thick description' related to trainer usage of reaction evaluation
Analysis of qualitative data		To give depth to findings generated from qualitative data.

**Table 3.2 The Main Study Research Sequence**

## THE COLLECTION OF QUANTITATIVE DATA

The collection of the quantitative data formed the first part of the main study research sequence.

### *Collecting data on the relative frequency of feedback factor use*

Quantitative data demonstrating the frequency of use of reaction evaluation as a feedback factor by consultants when engaged with training was collected using a card sorting activity. Consultants individually sorted the eleven feedback factor cards into one of the three categories: *frequently used, sometimes used, never used*.

This activity was supported by an initial discussion within the group of consultants to agree a definition of what was understood by 'frequent use' and 'sometimes used'. Following the discussion the definitions agreed were:

*'frequent use'* - feedback that is used during or following completion of every training course;

*'sometimes used'* – feedback that is not used during or following completion of every training course.

### *Collecting data on which feedback factors are used to support which training skills*

Further data was collected to demonstrate how frequently reaction evaluation was used to support improvement of the agreed training skills identified by the consultant. Each feedback factor had been given a code letter. Consultants were given the training skills' list, and asked to place the code letters of their *frequently used* feedback factors against the skills on the list that they felt the feedback factors improved. Appendix 4 shows an example of a completed coding sheet.



Designed to enable a pattern of how particular feedback factors were used to support particular training skills to emerge, and an additional feature of this data collection activity was that the coding could be referred to during interviews with selected consultants. This allowed for focused questioning related to those feedback factors most frequently used by respondents, and also enabled discussion of those factors never used, alleviating my concern that if respondents had not mentioned reaction evaluation as a factor then to introduce it into the interview would result in 'leading' the interviewee and bias their information. Using the process by which the respondents sorted the feedback factors into categories led to a more legitimate questioning during the interview stage both of those feedback factors used, and those not used. This enabled the development of reasons related to both the use and non-use of reaction evaluation to be investigated minimising researcher bias.

### *THE COLLECTION OF QUALITATIVE DATA*

The collection of the qualitative data formed the second part of the main research sequence.

The decision to use semi-structured interviews was made in order to follow up the results of the consultant sorting of the feedback factors related to frequency of use. The interviews were used as means to go deeper into what motivated the consultants to sort the factors as they did, and to investigate their reasons for sorting as they did.

Deciding an interview sequence and some questions in advance ensured that the reasons consultants had for using and not using different feedback factors were covered with each interviewee, and yet allowed for the tone of the interview to remain conversational. Relating the interview to data already collected through the quantitative activity helped to ensure that important topics were not going to be missed, and the semi-structured nature of the interviews

assisted the comparability of responses. Controlling reliability through a highly structured interview with the same format and sequence of questions for each interviewee (Silverman, 1993) was not appropriate for the intention of the interview, which was to enable the selected consultants to articulate their unique way of using feedback mechanisms. What is a suitable sequence of questions for one person might be less suitable for another, and open-ended questions enabled me to respond to any important, but unanticipated, issues that interviewees raised. Appendix 5 shows the interview schedule.

The selection of the interview sample was informed by the consultants' responses when they identified the feedback factors that they used most frequently. Consultants each annotated a copy of the agreed list of training skills, using codes to indicate the incidence of their frequently used feedback mechanisms. Taking these results, I totalled the number of times a consultant had indicated the use of each feedback mechanism, building up a profile of totals for each feedback mechanism for each consultant. The interview sample was selected based on the consultant profiles for reaction evaluation use. This resulted in five semi-structured interviews being planned; two with consultants who indicated high use of reaction evaluation, two with consultants who indicated low use of reaction evaluation, and one with a consultant whose profile of use placed them between higher and lower using consultants. Unfortunately, one of the consultants indicating high use was on maternity leave at the time of the interviews, reducing the total number of interviews to four.

### *ISSUES OF VALIDITY AND RELIABILITY*

'In qualitative data the subjectivity of respondents, their opinions, attitudes and perspectives together contribute to a degree of bias.' (Cohen *et al*, 2000, p 105). The qualitative aspect of my study, especially taken with the consideration that my role was as a



researcher also working within the research context, does require reflection in the light of issues of validity and reliability.

#### *The validity and reliability of the sample*

One danger related to the selection of a sample where the prospective respondents are known to the researcher is that the researcher may 'select' sympathetic respondents, thereby offering the potential for a skewing of the breadth of responses. My selection of the sample, based on the profiles of the extent to which they used reaction evaluation, went some way to avoiding this. Whilst I could not avoid the fact that colleagues agreed to be interviewed in order to help me, through my choice of sample I did try to ensure that there would be a breadth of response for the use of reaction evaluation, based on the responses the consultants had made in the quantitative data collection.

#### *The role of the researcher as 'insider'*

Hockey (1993) accepted that there were risks associated with researchers who were researching within their own context, and identified that one of these was the risk that 'taken-for-granted assumptions' (Hockey, 1993, p 199) would remain unchallenged. However, Hockey also offers a number of advantages for insider research, one of which is that the context of the research will be understood and appreciated by an insider in a way not open to an outside researcher. Frank (1997) takes this view further and suggests that researcher bias may provide deeper insight into the context because an insider's 'reflection on components of understanding that are not rational can result in important shifts of perception and interaction' (Frank, 1997, p 93).

A further advantage is the possibility of enhanced rapport between research participant and insider researcher, with participants feeling that the researcher is 'on their side', through knowing that the



researcher has to do the same things and work in the same context. However, whilst Hockey argues that participants might divulge more personal details of their lives to 'someone considered empathetic', there is no argument for insiders being the only researchers to be empathetic. Some participants might find it more difficult to divulge personal details to a colleague than to an outsider, as the continued presence of the researcher even when the research is at an end would be a reminder of confidences shared.

Hockey does caution insider researchers against presuming that their knowledge reflects the full picture of the researched location, and this emphasises that no one person's experience of reality is the same as any other. Even insider researchers are strangers to the actual reality of the participants as there are so many influences on each person's reality. Senge (1998) comments that it is comfortable to apply 'familiar solutions to problems, sticking to what we know best', but that this can prevent the objectivity and sense of distance needed to appreciate interrelationships within the context, and to usefully interpret them.

I realised that, as an insider researcher, there was a danger that my own perceptions related to the use of reaction evaluation could influence the research, particularly during interviews with participants. This potential for bias was in addition to that generally related to the researcher as 'research instrument' during interviews. The methodology of the study therefore needed to enable bias to be reduced, and this was attempted through the quantitative data collection methods, but I also needed to clarify my position in relation to the importance of the researcher striving for objectivity.

Bell (1993) comments that objectivity may be an impossible goal, but that researchers should try to attain it nonetheless. As Powney and Watts (1987) suggested, bringing in my own personal viewpoint

could be a distraction to the respondent and may increase the danger of the respondent being acquiescent and prey to self fulfilling prophecy, giving the kind of information that coincides with what the interviewer apparently wants. Certainly I accepted that through working in the same context, and having training evaluated through reaction evaluation myself, I could not be completely objective, and that the qualitative data collected within the research would present additional problems of objectivity and validity. Hubbard *et al* (2001) challenge the concept that the researcher is only an instrument, questioning any belief that a researcher could remain an objective, scientific onlooker, and I needed to consider further research about this aspect of my research in order to understand the relationship between myself and the qualitative data collected.

Maxwell (1992), in agreement with Mischler (1990) suggests that 'understanding' is a more suitable term than 'validity' in qualitative research, accepting that we as researchers are part of the world, even when researching outside our own context, and therefore cannot be completely objective about it. Blumenfeld-Jones (1995) suggests that 'fidelity' requires the researcher to be as honest as possible to the self-reporting of the researched, and Hammersley (1992) suggests that validity in qualitative research replaces certainty with confidence in our results. This indicates that accounts will be representations of reality, rather than reproductions of it.

I found that the concept of 'confidence' in results was one that I could relate to as a researcher, and that through realising the potential for bias I would be able to guard against it, particularly when conducting semi-structured interviews. However, I did also accept that through my reflection on the data I was able to provide insights into the context because of my experience; further accepting that these insights not only enhanced the research experience but changed my own perceptions of the context as the research progressed.

LeGallais (2003, p1) recommends researchers explore the degree to which they can be called 'native' or 'stranger' in the research context, and to utilise the best aspects of both roles to inform the research experience. Throughout the research I tried to hold this view recognising that on a researcher continuum, as a peer to the participants, my position provided the benefit of achieving in-depth empathetic access to interpretation of data, balanced against the dangers of overfamiliarity, risk of researcher bias and presumption of researcher knowledge, by both myself and the respondent.

#### *The role of the 'insider' researcher as interviewer*

Hockey (1993, p 208) states that 'the main problem once access is gained by the insider researcher is, simply put, to *make the familiar strange*: to maintain enough distance so as to ensure that the analytical half of the insider/outsider coin operates effectively.'

Whilst I was careful not to give information during the interviews about how I used reaction evaluation, or how I felt about its value as a form of feedback, I did feel that investing a little of myself by sharing some information was important as part of the process of developing trust with respondents (Logan, 1984) and demonstrating attention and interest in what the respondent was saying (Hawkins, 1990). It was evident that this degree of interaction varied from interview to interview, depending on who was being interviewed.

## ETHICAL ISSUES

### *THE NATURE OF THE RESEARCH PROJECT*

Investigating the way in which consultants use feedback within their working context, led to a number of ethical issues related to participant confidentiality, and informed consent. There were also



aspects of the research generating issues around the researcher / respondent relationship, and access and acceptance.

### *Confidentiality*

It was important that I secured confidentiality for research participants as much of the data collected through surveys and interviews related to their views and behaviours concerning their own professional development, and was potentially very sensitive.

In studying the use of reaction evaluation used in a particular organisation, any response from participants, either positive demonstrating clear links to their improvement in training skills, or negative demonstrating little impact, indicated a judgement by participants of the value they placed on feedback. In addition, there was perhaps implicit within the responses the consultants' view of the organisational provision of feedback for them as trainers. Consequently, there was the potential, if contributions to the research were identifiable within the thesis, of influencing the management view of particular consultants, in terms of both their inclination to improve performance and their view of the organisation. Admittedly, the impact of either of these issues would ultimately be related to the capacity of the organisation to be accepting of employee views, but regardless of any assumptions being made that an LA would by nature be an open and 'learning' organisation, I felt it best to develop a security of confidentiality of response.

With semi-structured interviews as a key data collection instrument, anonymity could not be applied because the participants agreed to face to face interviews with me, and so, if only at the researcher level, they were known and the information they provided was attributable, as it was recorded. However, confidentiality was assured by my writing of the thesis in such a way that the connection between what individuals offered as information would in no way be made

publicly. Participants accepted as part of their agreement to take part that any recordings, or other data, would be accessible only to the researcher, and all participants were given copies of their personal interview transcripts.

It was also an issue that, whilst studying a small group of PNS consultants was useful as a means to delimit the research, the focus on a relatively small group within the organisation did mean that I needed to put safeguards in place to prevent potential identification of consultants in the group. At first confidentiality was to be secured through the removal of any potential identifiers during the writing, but changes within the LA organisation during the period of research actually worked to aid confidentiality. Following the introduction of the Primary National Strategy, and the development of Children's Services within the County Council, all advisers became referred to as Primary National Strategy advisers, making clear identification of specific groups of advisers within Children's Services difficult, thereby supporting the confidentiality of the group assisting in the research.

### *Informed consent*

Although the context of my research did not directly touch on highly sensitive aspects of relationships or behaviour, for example, religion, or abuse, there was an aspect to the research where, by asking participants to discuss their motivation to develop their own skills with a colleague, outside the normal performance management interview situation, very personal thoughts and beliefs could be expressed by participants. Participants needed to trust that I as researcher would maintain confidentiality, and needed to be assured that I would act as impartial a researcher as I could be in this context. (This issue of the ethics of the researcher-respondent relationship is further developed later in this chapter.)



For these reasons it was important that I had a very clear protocol for informed consent, and I followed the four level definition of Diener and Crandall (1978); competence, voluntarism, full information and comprehension.

In terms of competence of participants to understand what was being asked of them and what was planned, I felt secure in that I was working with an educated group of participants who were confident with the concept of research and were knowledgeable about the research process. However, I did ensure that, all participants were given written details outlining the nature of the research and the data collection methods planned. In addition, at all stages of the research sequence, participants were offered the option to choose whether or not to take part, enabling me to adhere to Diener and Crandall's second requirement; voluntarism.

The third requirement, that full information should be provided at all stages of the research, was adhered to as far was applicable. I did make the decision in the initial study, not to reveal that reaction evaluation was the key feedback factor under scrutiny for I considered that to reveal it could prejudice the results. Participants could potentially place undue emphasis on the importance of reaction evaluation because they wanted to appear helpful me, or subconsciously inflate its importance through it being the focus of the research. Referring to Kimmel (1988) who claims that few researchers feel that they can do without deception entirely since the adoption of an overtly conservative approach could deem the study hardly worth the effort so much bias would be created, I felt that it was ethical to manage carefully the extent to which participants were made aware of the research focus.

Whilst recognising Aronson and Carlsmith's view (1969) that one cannot imagine researchers who are studying the effects of group



pressures on conformity announcing their intentions in advance, my research was far from being a 'conspiracy of silence', and did not need to be deceptive. However, I did not want to prejudice data, and I felt that there was enough precedence within research methodology to hold the view that information related to the research would not be fully shared with participants. I ensured that enough detail was provided for participant reassurance, using guidelines of reasonably informed consent (Cohen *et al*, 2003, p 51), and, as with Plummer (1983), different accounts of the research are presented to different groups, for example, for participants, for fellow OU students, and for friends unassociated with the research. None lie, each emphasises different aspects.

In terms of comprehension, Diener and Crandall's fourth requirement, I ensured that participants really did understand the risks and potential benefits with being involved in the research. Here I was helped by using highly educated participants, and by spending time explaining and offering to answer questions.

#### *The researcher / respondent relationship*

Some ethical considerations were more straightforward as my research was conducted between peers, and focused on researching adults, educated and working within an educational context, rather than involving the additional implications that occur when studying children. However the researcher as 'insider' within the working context was a further ethical issue for me to consider.

As a colleague to participants in the research the ethics of me being privy to their thoughts and values related to their professional development within an interview context, a very different context to a social context, needed to be considered. Part of the management of this issue was achieved through the process of informed consent, as all participants were clearly informed of the nature of the research

and the respondent-researcher roles. It was made clear that participation in the study was entirely voluntary, and it is hoped that no participant felt obliged to be involved for 'friendship's sake', although any influence of this is impossible to assess.

Another part of this issue was managed through the sideways selection of participants who were all employed at the same Soulbury pay level as the researcher, and who shared the same work profile. My position in the working context was neither superior to any of the participants, nor inferior, so whilst attention had to be paid to the researcher-colleague relationship, issues of power in terms of organisational position were not present. Although a perception of the researcher holding the power, as the researcher is the one asking the questions, did have to inform my interviewing behaviour during the interviews.

#### *Access and acceptance*

As a researcher working within the research context, access to that context was for me not an issue. Both colleagues and line managers knew that I was working on educational research, and official permission was given by the line managers. The management supported the research in two ways, through some financial support and through the provision of time for group activities within consultant team meetings.

However, issues of acceptance needed to be considered when requesting interview time from colleagues whose diaries were already very full. Assurances had to be made that the interviews would only last forty-five minutes. This influenced the research sequence, leading to the development of data generated in team meetings, sometimes as group activities and sometimes as individual activities. This data was then expanded during the semi-structured interviews rather than developed by using only a qualitative

approach, and the schedule of the research was organised so that the interviews were undertaken during the first week of the summer break for schools. Consultants were still working during this period but did not have to juggle school visit commitments in order to find time to be interviewed. Having undertaken an initial study also proved to be important in encouraging colleagues to accept the research, as those consultants interviewed during the initial study were able to reassure others that the timings of interviews would be adhered to.

Acceptance was also addressed through the process of reasonably informed consent, and participants were made aware of, and could discuss, the issues of beneficence and maleficence related to the research at any time.

## CONCLUSION

Combining quantitative and qualitative data collection methods supported my intention to measure the degree to which PNS consultants used reaction evaluation, and to deepen this understanding with interview data that revealed underlying reasons for the varying degrees of use.

This chapter has sought to show the way in which the initial study was instrumental in supporting development of the main research design, through the use of the findings from the analysed semi-structured interview data and by lessons learned relating to methodological issues. In Chapter Four I develop the analysis of the initial study findings, and begin to consider an interpretation of how trainers use reaction evaluation in both PNS and independent training contexts.



**CHAPTER 4**

**BEGINNING TO INTERPRET TRAINERS'**

**USE OF REACTION EVALUATION**

**INITIAL STUDY ANALYSIS AND FINDINGS IN**

**PNS AND INDEPENDENT TRAINING CONTEXTS**

## INTRODUCTION

Building on the mixed methods approach that I adopted as my research strategy, each of the different phases were initially analysed separately. The findings are presented, phase by phase, in Chapters 4, 5 and 6. In Chapter 7 my analysis is developed to consider the findings in an integrated way across the phases in order to answer the main research question.

This chapter focuses on the data generated from an initial study which was undertaken at an early stage in the overall project and plays a significant part in the generation of my theoretical framework. The data were analysed and used to identify the feedback factors that were considered important by the trainers and, hence, the outcomes were crucial to other parts of the study.

Analysis of the factors trainers mentioned in their interviews supported an initial categorisation of factor sub-divisions, and further analysis of the interview transcripts gave early insights into the reasons trainers have for valuing and using some feedback factors more than others.

### *THE IDENTIFICATION OF FEEDBACK FACTORS*

The semi-structured interview data was coded to define categories related to the feedback factors trainers identified as useful. This coding revealed that the trainers in the sample identified a total of ten feedback factors. Different trainers identified different factors during their interviews, and the list shown on Table 4.1 is a compilation of the factors identified by the sample. Table 4.2 shows the references trainers in the sample made to each factor.

<b>Code</b> <b>1</b>	<b>Comments from Reaction Evaluation forms</b>
<b>2</b>	Observing participant response during training, and from these making judgements about the effectiveness of activities and training methods
<b>3</b>	Receiving formal feedback following performance management observation
<b>4</b>	Considering the effect of learning activities when attending a course as a participant
<b>5</b>	Putting self in place of participants when observing others training
<b>6</b>	Discussion with peers about own performance following training delivered with a partner trainer
<b>7</b>	Being requested to provide more training
<b>8</b>	Observation of the transfer of elements of training into classrooms
<b>9</b>	Making changes following own study, for example, reading about methods of training found to be effective for adults
<b>10</b>	Observing other trainers at work and making judgements about effective behaviours and activities

**Table 4.1 The ten feedback factors identified from semi-structured interview data**

**Table 4.2 Shows where respondents made at least one reference to a feedback factor during their interview.**

<b>Respondent Code</b>	<b>Feedback Factor Coding Number</b>									
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>
<b>A</b>	*	*	*	*	*	*				*
<b>B</b>	*	*		*	*					*
<b>C</b>	*	*		*			*	*	*	*
<b>D</b>	*	*		*	*	*			*	*
<b>E</b>	*	*		*	*	*		*	*	*



**A CATEGORISATION OF FEEDBACK FACTORS**

The list of ten factors was then sub-divided into three categories. This sub-division, differentiating the origins of the factors within the trainers' work context, is shown in Table 4.3.

<b>Subdivision 1: Formal Feedback Factors</b>
Comments from Reaction Evaluation forms
Receiving formal feedback following performance management observation
<b>Subdivision 2: Self generated Feedback Factors</b>
Observing participant response during training, and from these making judgements about the effectiveness of activities and training methods
Discussion with peers about own performance following training delivered with a partner trainer
Observation of the transfer of elements of training into classrooms
Being requested to provide more training
Considering the effect of learning activities when attending a course as a participant
<b>Subdivision 3: Motivational factors</b>
Observing other trainers at work and making judgements about effective behaviours and activities
Putting self in place of participants when observing others training
Making changes following own study, for example, reading about methods of training found to be effective for adults

**Table 4.3 The subdivisions of feedback factors and motivational factors.**

Sub-division 1 contains *formal feedback factors*. I decided to use the term 'formal' because they are generated either by an evaluation of

training by the organisation in which the trainer works, or form part of a performance management programme.

Sub-division 2 contains feedback factors generated independently by the respondent as part of a personal process of professional self-evaluation whilst conducting training. This sub-division is titled '*Self Generated Feedback Factors*', and includes the factors 'observing participant response during training' and 'observation of the transfer of elements of training into classrooms'.

Sub-division 3 also contains factors independently generated by the trainer as part of a personal self-evaluation of successful training behaviour and methods. But I have categorised these as '*motivational factors*' leading to change, rather than feedback factors resulting in change.

Reaction evaluation was identified as a supporting factor by each of the five respondents. However, also identified by all respondents were the factors;

- observing other trainers at work and making judgements about effective behaviours and activities;
- observing participant response during training, and from these making judgements about the effectiveness of activities and training methods;
- considering the effect of learning activities when attending a course as a participant.

Whilst this finding served to highlight the apparent importance trainers placed on reaction evaluation, it also highlighted that there were other feedback factors that trainers considered as important.

The ranking activity respondents completed develops this aspect of importance further. Table 4.4 shows the respondents' combined

significance ranking of the four feedback factors identified by all respondents.

**Table 4.4 The commonly identified feedback factors ranked in order of significance**

Ranking	Factors identified by all participants in the sample
1	Considering the effect of learning activities when they were themselves participants on a course
2	Observing other trainers at work and making judgements about effective behaviours and activities
3	Putting themselves in place of participants when observing others training
4	Comments from Reaction Evaluation forms

*Self generated* feedback factors and *motivational* factors hold the three highest rank positions, and all are factors triggered in contexts where the trainer is in the position of a learner or observer, and not where they are directly involved in delivering training.

Ranking reaction evaluation fourth in Table 4.4 may serve to suggest that the trainer's motivation to change is more developed by factors which relate to the trainer making personal decisions about what constitutes effective learning. It could be suggested that, because reaction evaluation is based on the participants' perception of the effectiveness of the training, trainers value it less than their own experience and personal judgements. Generated from the trainers'



own experience these factors appeared to indicate that trainer experience was at least as influential in supporting the development of training skills as was formal feedback, provided by reaction evaluation.

### ***INVESTIGATING TRAINERS' REASONS FOR USING PARTICULAR FEEDBACK FACTORS***

During their interviews, respondents were encouraged to explain the value rankings they assigned to their identified feedback factors. Each statement in this part of the interview was ascribed a code. Through the refining process, carried out to ensure the consistency of the codes, I found that the most frequently occurring codes across the sample, when they discussed their value ranking of reaction evaluation, related to two categories.

These were:

- *Satisfaction*
- *Trustworthiness*

'*Satisfaction*' was expressed by respondents in two ways.

Firstly, reaction evaluation was viewed as useful in offering feedback on participant satisfaction following training. However, respondents also expressed how reaction evaluation supported their own feelings of satisfaction about training.

<p><i>'I find these useful as a record of how teachers feel...how satisfied they were.'</i></p>
---

This respondent describes reaction evaluation's role in providing evidence of participant satisfaction.

The respondent goes on to explain how the ratings scales on the reaction evaluation are key to providing a personal feeling of satisfaction with the course.

*'We all like to get 1s and 2s don't we? It makes us feel that we've done a good job.'*

Such comments, relating to participant and personal satisfaction, are perhaps more linked to reinforcement of current training behaviour than to motivating change. What they do show is that trainers see reaction evaluation as providing a view of training. This 'reinforcement' role for reaction evaluation supporting satisfaction can be seen in the quote from another respondent.

*'I suppose if the information is useful it's as ...um ... a reinforcement of my view of the course. They (the course participants) felt the same way as I did.'*

This touches on trainer and participant perceptions of the same training event, and the way in which reaction evaluation may reflect differences or similarities. The quote appears to indicate that reaction evaluation will support the trainer's own view of the course, and not necessarily only the positive aspects. It might therefore act to motivate change in the trainer's behaviour. However, the quote also suggests that improvement might only occur where participant comment matches the trainer's own perception of the training. If the trainer agrees that something needs to change; then it may change. If the trainer does not hold the view that change is needed the participant perception may not necessarily be deemed relevant enough by the trainer to lead to change. This quote can be seen to overlap into the second theme – *trustworthiness*.

The notion of reaction evaluation as 'trustworthy' is, within this sample, entirely related to reasons for using reaction evaluation as a motivator for developing training skills.

*'I've been training for five years, and find I use these less and less. ... because of the conscripted nature of the participants on our courses. They have often been 'sent', not selected the training for themselves, and they have little connection with the course. I quite honestly feel that the information is often not reliable'*

This quote shows the way in which the role of reaction evaluation appears to have changed for one respondent. Although it is not clear whether this is because the nature of the participants has also changed, becoming more 'conscripted' as the years have passed, it does introduce the notion that the nature of the participants on a course will have an effect on how trustworthy reaction evaluation is felt to be. It also suggests that if reaction evaluation is felt to be untrustworthy, then it will be seen as unreliable and not used.

A further view related to trustworthiness comes from another respondent.

*'A lot of our participants are unsatisfied before they come – due to factors outside our control. Reaction evaluation may show they became a little more satisfied, but often participants have already made their decisions before the course begins.'*

Here the trainer view that many participants are unsatisfied before they arrive at training is carried into the assumption that participants' hold preconceived ideas about the value of training. In this respondent's view negative participant response is a reflection of the participant's prior dissatisfaction. The respondent does not view comments as trustworthy because they are not considered to be a product of the training experience.

This respondent also discussed how other factors related to the training situation appeared to have an influence on how satisfied



participants were. They discussed the difference in experience of training in each of two different venues. One venue was perceived as attracting participants who were *'much more positive'*, whilst at the other venue participants were referred to as *'much more mixed, often jaded and more difficult'*. The respondent discussed how the same training course, run in an identical way at each of the two venues was evaluated by participants quite differently. This, whilst anecdotal, strengthened their perception that reaction evaluation from one venue would be less trustworthy than at the other.

In addition, respondents commented on how providing food before training improved participant *'well being'* and attitude towards training, and how half day training courses created stress for participants as they either rushed to return to school following a morning course, or rushed to arrive for an afternoon course. These situational factors were cited by respondents as influencing the attitude of participants to the training, and for two respondents negative comment related to training was seen to be a direct result of these external factors. The impact of external factors on trustworthiness for some trainers would appear to hold particular significance for motivation to change following reaction evaluation feedback.

In addition to the categories developed for reaction evaluation are those developed from codes assigned to the respondents' discussion of their reasons for ranking other feedback factors as important in supporting change. Codes appearing most frequently were related to the categories:

- *Judgement*
- *Responsibility*
- *Relationship*

Respondents relied on their own judgement of what was effective and ineffective. Several held a view that experience as teachers had

given them a good grounding in what would work, and consequently they applied this knowledge when making changes to training.

*'Because I'm training teachers, and I was a teacher, we come from the same experience and so activities that work for me will work for other teachers.'*

Trainers felt a sense of responsibility to improve their training and to develop their skill, because they felt that the role of trainer reflected their responsibility as 'expert' in the relationship between trainer and participant. They indicated that a motivation to change was more likely to be stimulated by their own judgements, observations and experiences, than by participant comment.

*'I put myself in the place of course participants and consider how the activity would help me.'*

*'If something doesn't work very well for me, then I don't use it when I'm training.'*

A link can be made to 'trustworthiness' in that these trainers appeared to consider their own decision more trustworthy than a participant's, viewing the role of trainer as one of responsibility and a position of some power.

*'It's useful to find out what they (course participants) thought about the materials and the venue, but ultimately changes to training are my responsibility.'*

The notion of 'partnership' in the training process did not appear central to the trainers' views, and perhaps acting to support this notion is the belief that many participants were often dissatisfied

before and on arrival at training, leading to participant feedback of all kinds being related to prior experience rather than the training experience.

Trainers articulated that working with or watching other trainers were important influences on their own presentation, reinforcing that there was more acceptance of an 'expert' to 'expert' transfer of skills, than a response to the partnership between trainer and participant.

Although one trainer in the sample did explain that different feedback factors were triangulated, for example, that reaction evaluation comments were compared to the trainer observation of participant reaction during training, and discussing their performance with peers following training.

## CONCLUSION

### *HOW DO THESE INITIAL STUDY FINDINGS RELATE TO THE INITIAL RESEARCH QUESTION?*

The initial study findings indicated that this sample of trainers identified a wide range of factors linked to the further development of their training skills. Not all factors were related to feedback, indicated by the three sub-divisions; *formal feedback factors*; *independently generated feedback* and *motivational factors*.

Reaction evaluation was identified by all respondents in the sample suggesting recognition of its intrinsic value (Browne, 1997; Tamkin et al, 2002). However, all respondents also identified motivational factors, suggesting that development of training skills is not just a response to feedback, but links with research that emphasises an adult's need for self direction and active involvement in the learning process (Brockett & Hiemstra, 1991). This was further highlighted by the fact that respondents appeared to value the motivational factors



relating to their own role as learner more highly than feedback factors during the ranking activity.

The overall ranking of reaction evaluation suggests that trainers consider reaction evaluation to be uninformative (Carnevale & Shulz, 1990) in relation to other feedback factors, although it was apparent that the ranking obscured differences amongst the sample.

Trainers who valued reaction evaluation more highly gave the reason that as feedback it gave an indication of participant satisfaction with the training, and that this satisfaction acted as an indicator of effective training methods, leading to their continued use. This supported research that reaction evaluation is a measure of participant response (Antheil & Casper, 1986), but also suggested that trainers may focus on the satisfaction and enjoyment of participants, rather than on learning (Dixon, 1987). Respondents who queried the value of reaction evaluation appeared to recognise that there may be a difference between affective response and utility (Alliger *et al*, 1997), and assigned more value to factors providing evidence of practical use of training (learning) through observation of participants' transfer of skills into the classroom.

The way in which these initial findings are reflected by a particular group of PNS consultants is developed through Chapter 5, where I focus on the PNS consultants' response to reaction evaluation, as informed by the quantitative data collection within the main study; and further in Chapter 6, which focuses on the reasons underlying use of reaction evaluation for this group.

**CHAPTER 5**

**PNS CONSULTANT RESPONSE TO  
REACTION EVALUATION**

**AN ANALYSIS OF THE QUANTITATIVE DATA IN  
THE MAIN STUDY**

## INTRODUCTION

This chapter focuses on the responses that the group of PNS consultants made to the quantitative data collection. It begins with an analysis of the feedback sorting activity that the main group of PNS consultants took part in, and presents a broad picture of the frequency with which this group responded to different feedback factors. The chapter then moves to focus on the consultants' use of reaction evaluation, and provides the background for understanding how, subsequently, this analysis informed the selection of the semi-structured interview sample; the consultants selected for interview representing the range of frequency of reaction evaluation use, from low frequency use to high frequency use.

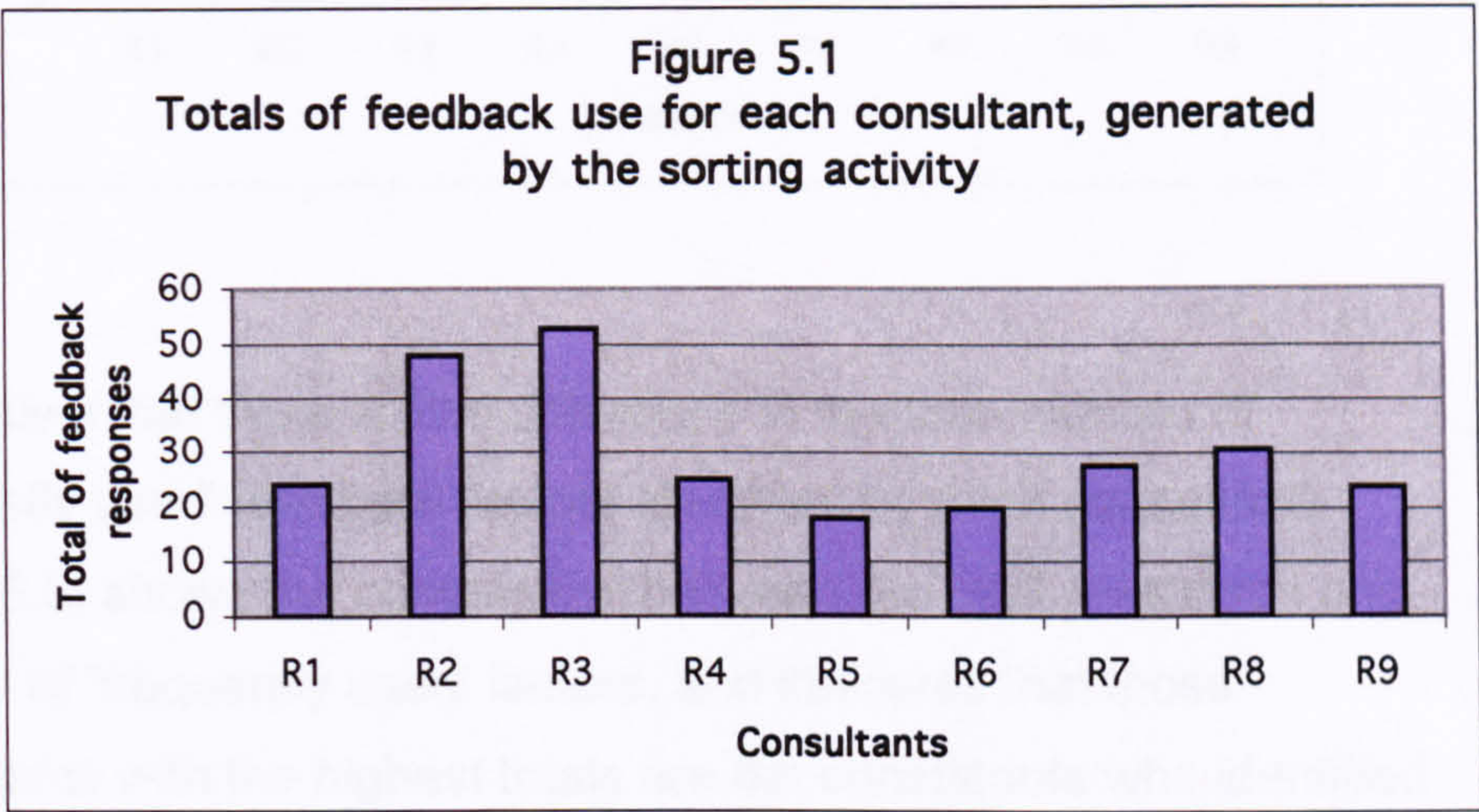
## DO CONSULTANTS USE FEEDBACK?

The data shown in Figure 5.1 and Figure 5.2 indicates the frequency with which consultants responded to different types of feedback.

Consultants demonstrated their use of feedback factors during the sorting activity, by assigning the factors they each used most frequently to each of the agreed training skills. Appendix 4 shows a sample of the recording form used by each consultant for this activity, and Figure 5.1 displays each consultant's response to this activity; the totals for each consultant represent the total number of feedback code letters they attached to the training skills. Figure 5.1 shows that consultants perceive feedback factors as supportive of training skill development. It shows that most consultants responded to the activity by assigning more than 20 feedback factor codes in total. Only one consultant displays a total less than this.



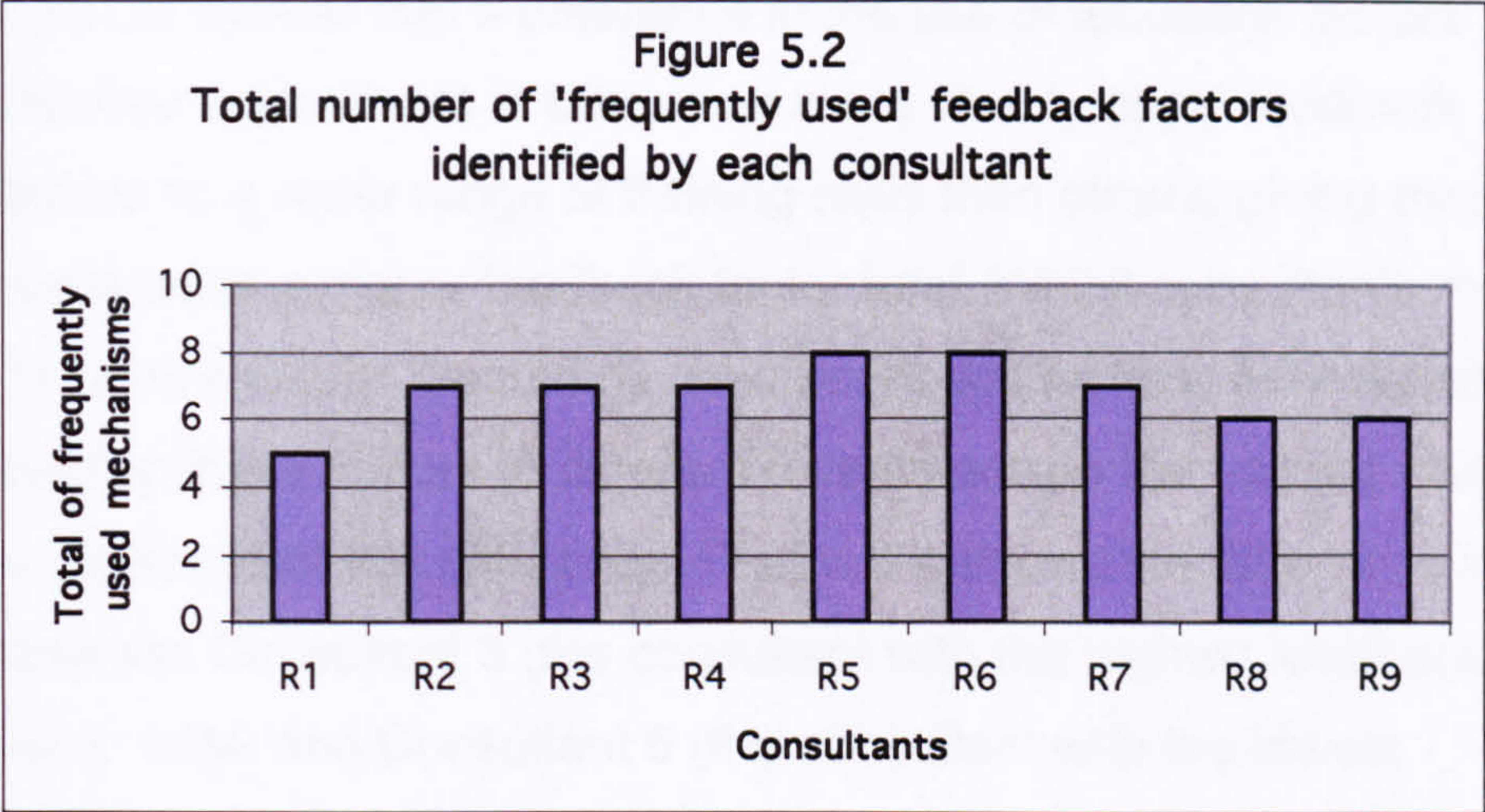
Within the group of consultants with totals greater than 20, 75 per cent fall between a total of 20 and 31. The remaining 25 per cent have totals above 45, and the difference between the consultants with the lowest and highest totals is 34. It appears to present evidence that some consultants in this sample use feedback factors to support the development of their training skills significantly more than others.



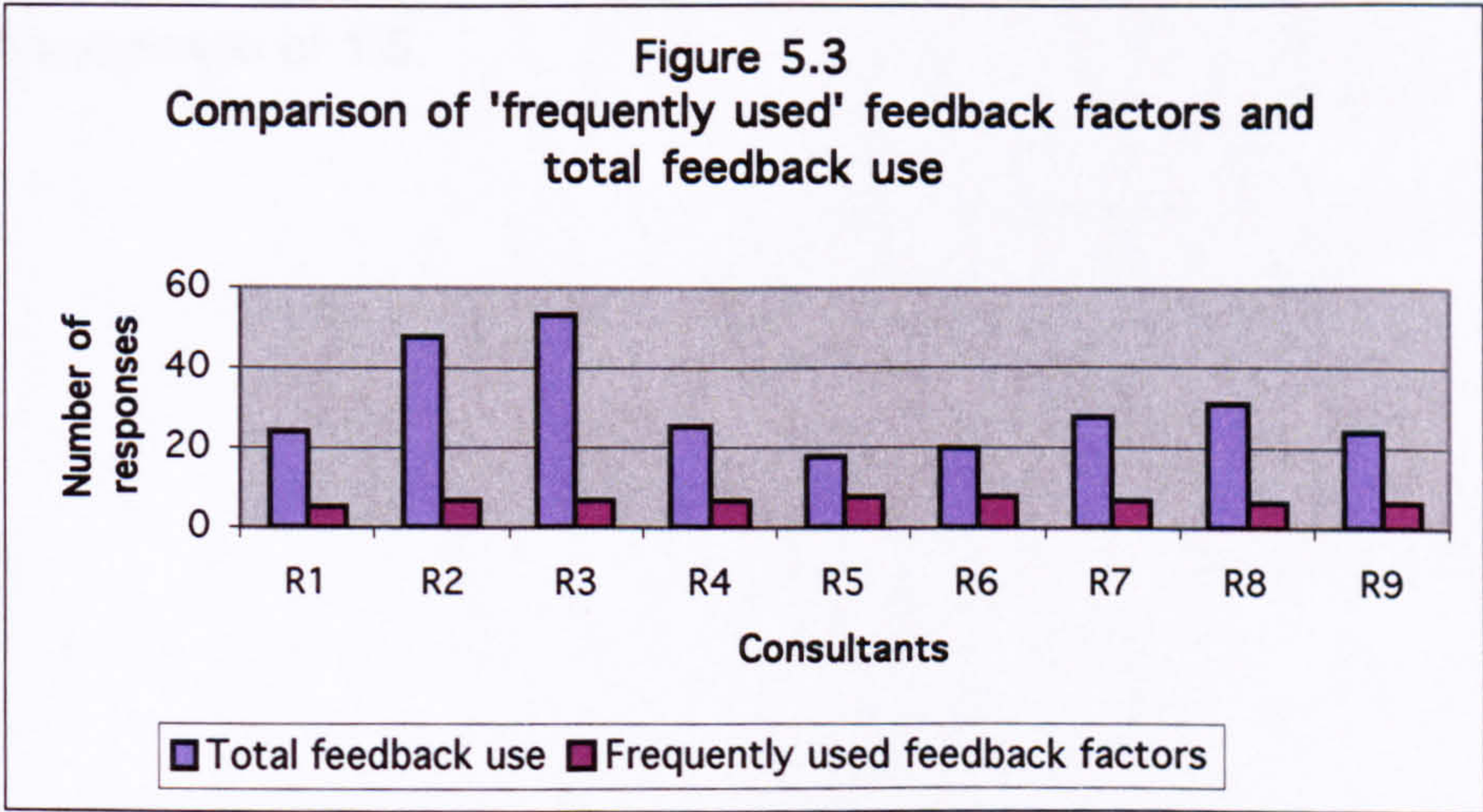
When exploring the reasons for the different totals of each consultant, I considered the fact that some consultants may have identified more of the eleven feedback factors as ‘most frequently used’, and this may have helped to create a higher use total. To test this possibility I analysed whether the consultants with the highest use totals were those who identified a great many different feedback factors as ‘frequently used’.

Figure 5.2 shows the total number of feedback factors identified by each trainer as ‘frequently used’.





This shows that there is little difference in the total number of 'frequently used' feedback factors identified by each consultant. Figure 5.3, shows the comparison between the total responses and number of 'frequently used' factors, and indicates that those consultants with the highest totals are not consultants who identified a large number of 'frequently used' feedback factors. This suggests that the difference in the use of feedback factors, within this group, relates to something other than the number of feedback factors considered important and 'frequently used'.



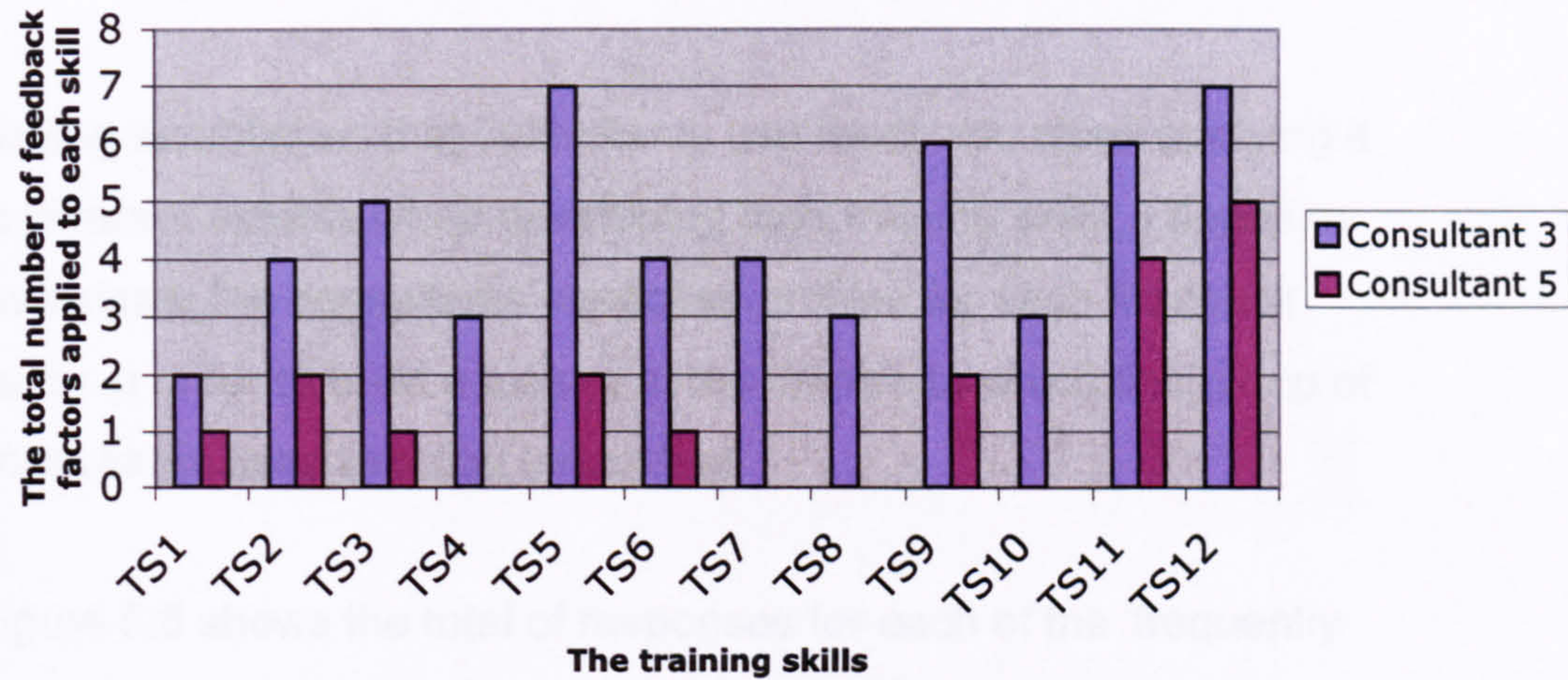


It would appear that a difference in the use of feedback factors between consultants is that some more readily apply feedback factors to a wider range of training skills than others; giving these consultants a higher feedback factor total. Whilst consultants may have very similar 'frequently used' feedback factors, they appear to employ these factors to different extents across the training skills. As an example of this difference, Figure 5.4 shows the difference in use between Consultant 3 (the consultant with the highest feedback factor total) and Consultant 5 (the consultant with the lowest feedback factor total).

Figure 5.4 demonstrates that the application of feedback factors across the training skills differs in two ways. Firstly, Consultant 3 applies feedback factors to the development of a broader range of training skills than Consultant 5; applying feedback factors to all twelve skills, whilst Consultant 5 only applies feedback to eight skills. Secondly, the number of different feedback factors applied to each of the training skills also varies between these consultants. Consultant 3 applying between two and seven feedback factors to each of the skills, while Consultant 5 applies between one and five feedback factors. When presented as an average, this gives Consultant 3 an average of 4.5 factors used per training skill, compared to Consultant 5's average of 1.5.



**Figure 5.4 Comparing two consultants' use of feedback factors across training skills.**



**Key to Figure 5.4**

Training Skill (TS)		Training Skill (TS)	
1	Write clear aims and objectives	7	Use interactive training methods
2	Select appropriate visual aids	8	Facilitate group activities
3	Deliver a training presentation	9	Schedule a learning event
4	Prepare appropriate materials	10	Ensure equal opportunities
5	Maintain audience involvement & interest	11	Evaluate own practice
6	Use feedback	12	Develop own practice

Within this picture of difference between consultants what role does reaction evaluation play?



## DO CONSULTANTS USE REACTION EVALUATION?

Having established that consultants use feedback, albeit applying it to different extents when developing their training skills, I began to investigate the consultants' response profiles for each feedback factor in order to build a picture of the degree to which this group of consultants used reaction evaluation.

Figure 5.5 shows the total of responses for each of the 'frequently used' feedback factors when applied to the list of training skills by all consultants.

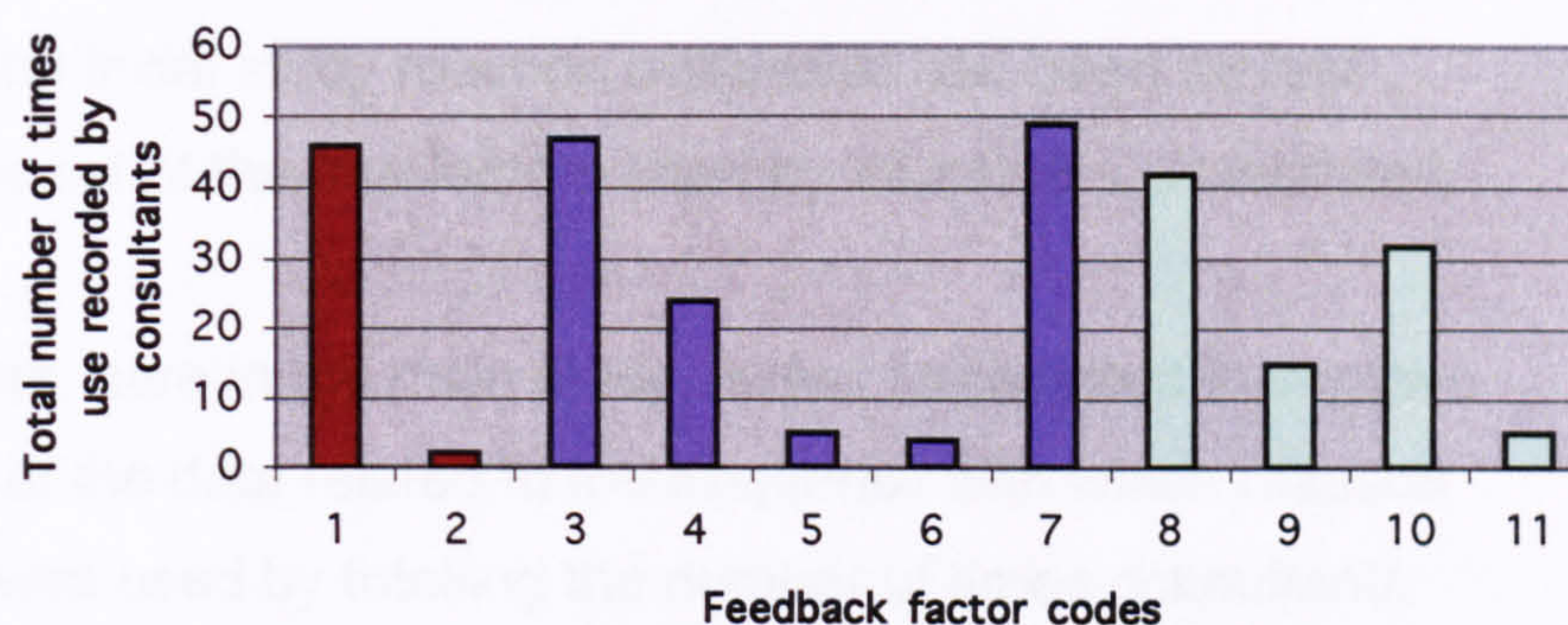
This shows that, whilst each of the feedback factors was identified as being 'frequently used' to support improvement of training skills, those most frequently assigned to training skills were:

- Considering the effect of learning activities when attending a course as a participant;
- Observing participant response during training;
- Comments from reaction evaluation;
- Observing other trainers at work.

This finding was consistent with the initial study interviews as that sample of trainers also identified 'Observing other trainers at work', 'Observing participant response during training', 'Reaction evaluation comments' and 'Considering the effect of learning activities when a participant' as feedback factors that they used to improve their training.



**Figure 5.5**  
Total consultant response for each feedback factor



**Key to Figure 5.4 – Feedback Factor Codes**

<b>1</b>	Comments from reaction evaluation	<b>8</b>	Observing other trainers at work
<b>2</b>	Performance management feedback	<b>9</b>	Making changes to training following own study
<b>3</b>	Observation of participant response during training	<b>10</b>	Putting self in place of participants
<b>4</b>	Discussion of own performance with peers	<b>11</b>	Making changes as a result of formalized peer coaching
<b>5</b>	Observation of transfer of training elements to classroom	<b>Formal feedback factors</b>  <b>Self generated feedback factors</b>  <b>Motivational factors</b>	
<b>6</b>	Being requested to do more training		
<b>7</b>	Considering the effect of learning activities when a participant		



## ***HOW IMPORTANT IS REACTION EVALUATION AS FEEDBACK?***

Reaction evaluation was identified as 'frequently used' by each consultant in the main study during the sorting activity, leading to it being placed as the third most frequently used of all eleven feedback factors. In the initial study reaction evaluation had been ranked fourth, in the list of the four factors used by all trainers interviewed.

What differs, here in the main study, is that I attempted to improve the validity of the data related to the frequency with which reaction evaluation was used by totalling the number of times consultants indicated its use to support training skills, rather than relying, as I had done during the initial study, on a ranking process. I was aware that the trainer ranking of feedback factors, whilst reflecting their priorities, had lacked a benchmark for comparison of the relative value of each of the feedback factors between different trainers. Having already sorted the feedback factors by considering their own use in relation to their agreed definition of what constituted 'frequent use', consultants in the main study had established a benchmark of frequent use. This made the comparison between the different feedback factors more secure.

Its place as the third most frequently used feedback factor, appears to indicate that reaction evaluation is considered a significant feedback factor, a suggestion supported by the fact that the difference between it and the highest scoring factor 'Considering the effect of learning activities when a participant on a course' was only a difference of three.

### ***Deepening the understanding of the importance of reaction evaluation***

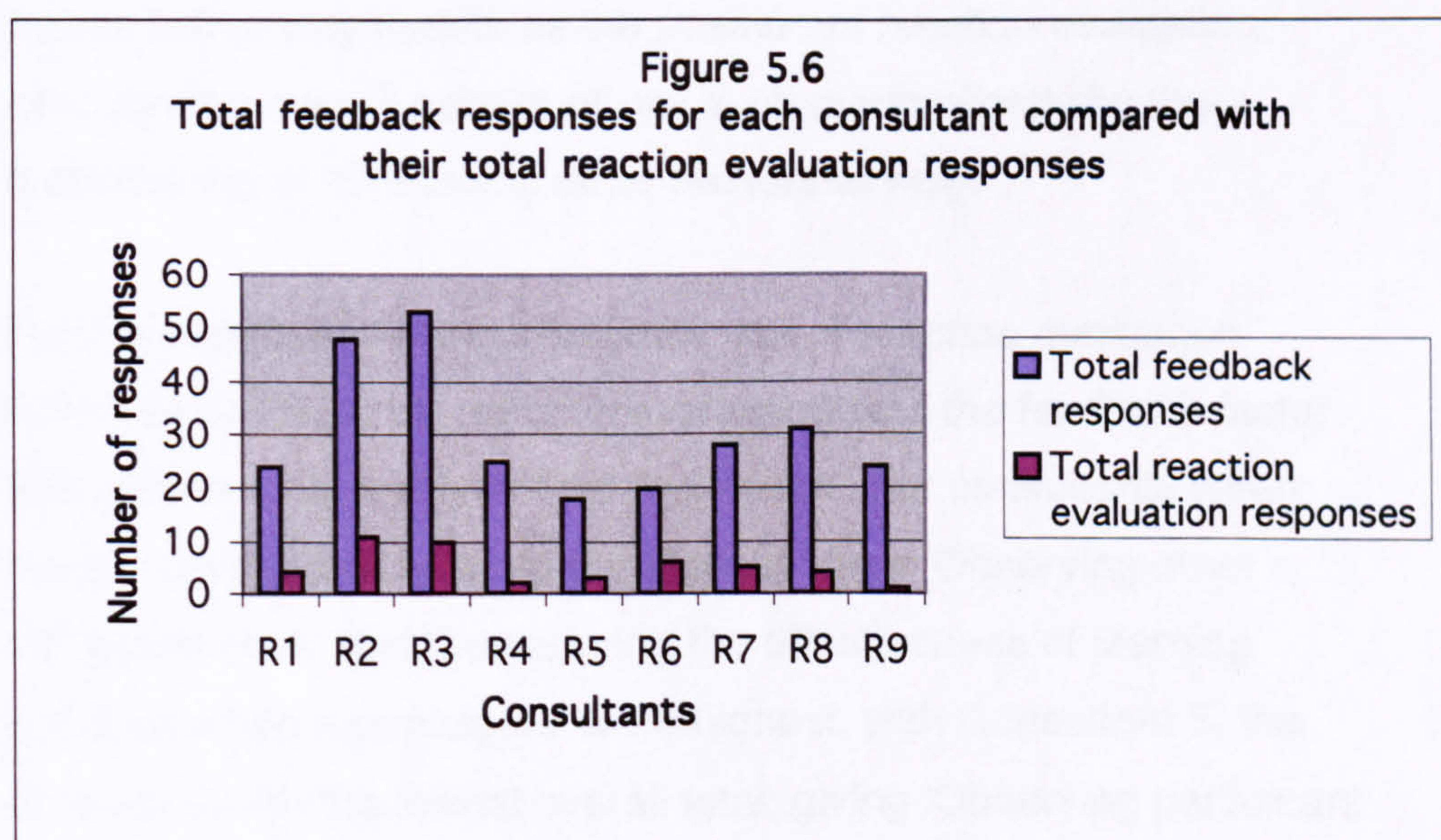
Initial analysis would appear to indicate that consultants in this group considered reaction evaluation to be a very useful form of feedback



to use to support development and improvement of their training skills. However, a closer look at the data reveals that the pattern of use of reaction evaluation varies greatly between consultants, and this variation offers a different picture of use to that achieved by the initial analysis of the total responses.

Figure 5.6 shows this variation in the total responses for reaction evaluation amongst the consultants. It illustrates a variation between an upper total of 11 responses for reaction evaluation from one consultant, to the lowest total of two responses. These figures demonstrating how differently reaction evaluation was used amongst this group.

Furthermore, of the 46 responses for reaction evaluation from all consultants in the group, the combined totals of two consultants accounted for 49 per cent of this total. The very high response rate of these two consultants has the impact of raising significantly the total reaction evaluation response score amongst these consultants, in relation to the other feedback factors. I investigated the effect of this by considering the median for the response rates for each of the six highest scoring factors. These results are shown in Table 5.1.





**Table 5.1      Median Score for each feedback factor.**

<b>Feedback factor</b>	<b>Median score</b>
Considering the effect of learning activities when a participant	7
Observing other trainers at work	6
Observing participant response whilst training	5
Reaction evaluation	5
Putting self in place of participants when training	4
Discussions with peers about own performance	4

This table shows that the median score for reaction evaluation places it joint third with 'Observing participant response whilst training'. 'Considering the effect of learning activities when a participant' retains the highest position. It is interesting that it is the position of 'Observing other trainers at work' that changes when the data is considered in this way; moving as it does up from fourth to second position. Balancing the effect of particular consultants with high scores in this way maintains the position of reaction evaluation, although the overall pattern of use is changed slightly by the repositioning of 'Observing other trainers at work'.

*Further variation in the consultants' use of reaction evaluation*

For three consultants, reaction evaluation was the feedback factor that scored most highly in their responses. For consultants where reaction evaluation was not the highest score 'Observing other trainers at work' and 'Considering the effectiveness of learning activities when a participant' were highest, with Consultant 5, the consultant with the lowest overall total, giving 'Observing participant response whilst training' as their most often used feedback factor.



Analysing the individual profiles of the consultants appears to offer an indication that reaction evaluation is valued more highly by some consultants than others. One interesting feature of the individual profiles is those consultants who scored reaction evaluation most highly, were the ones who totalled most responses to all feedback factors. It would appear that all feedback, not just reaction evaluation, is very important to these individuals.

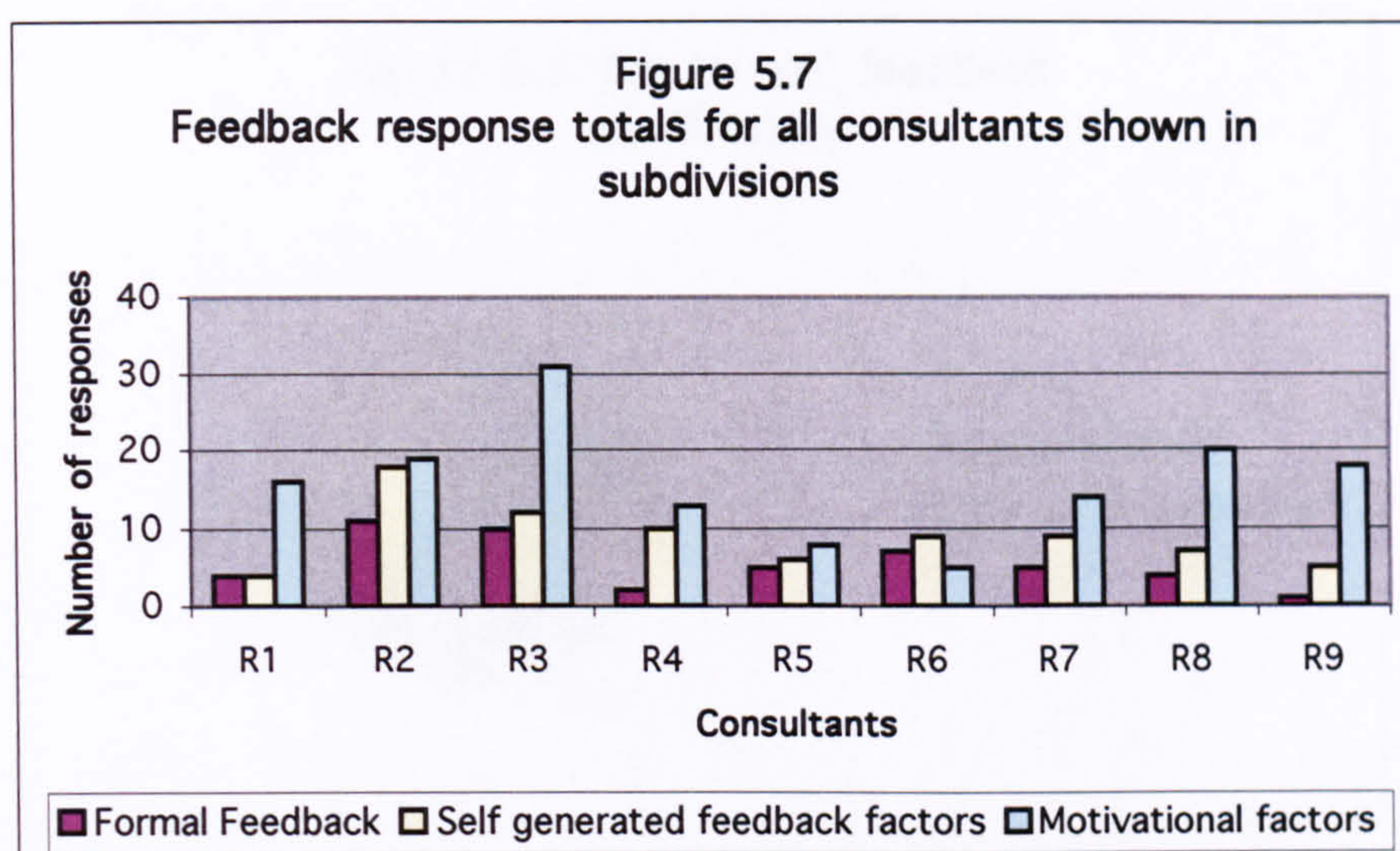
### *EXPLORING THE ROLE OF FORMAL FEEDBACK FOR CONSULTANTS*

Having considered the variations in the positioning of reaction evaluation amongst the group of consultants, I moved to consider how these variations reflected in the consultants' use of feedback factors from the sub-divisions of feedback factors I had categorised.

Analysis appears to demonstrate that consultants in this group used feedback factors from each of the sub-divisions, placing importance on 'formal feedback factors', as well as 'self generated factors' and 'motivational factors'. Findings in the initial study appeared to indicate that trainers used 'self generated factors' and 'motivational factors' more frequently than 'formal feedback', evidenced by the higher ranking assigned to factors in these categories.

Taking this analysis one step further I decided to investigate whether different consultants used feedback factors from some sub-divisions more than others. Figure 5.7 shows the consultant totals for feedback factor responses shown in sub-divisions.





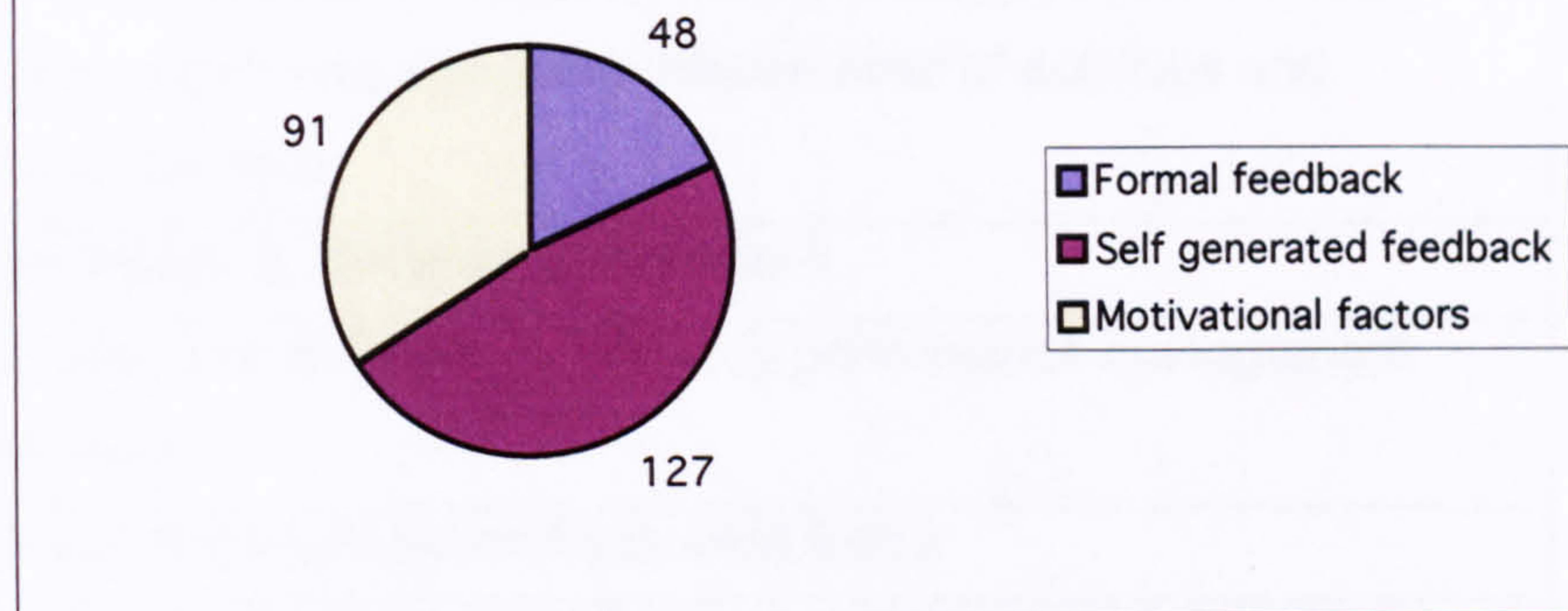
This shows that for 88 per cent of consultants self generated feedback mechanisms and motivational factors were identified as being used more frequently to support development of training skills than the formal feedback factors, of which reaction evaluation forms a part. This pattern of use included those consultants (R2 and R3) whose use of reaction evaluation as a form of feedback was significantly higher than other consultants.

Looking at the pattern across these sub-divisions, the display seems to confirm the finding that there are some consultants, that is R2 and R3, who find feedback *per se*, whatever its form, important as a support to development of training skill, giving larger totals in each of the sub-divisions than other colleagues. Other consultants view feedback with varying degrees of importance, and it appears that any importance attached is predominantly for motivational factors.

Sub-dividing the feedback factors in relation to their 'origin', either formal, self generated or motivational, resulted in the distribution of total responses accumulated from all the consultants being represented as shown in Figure 5.8.



**Figure 5.8 The 'origin' feedback sub-divisions**



The importance of the self generated and motivational feedback factors was evident, but I felt that the feedback factors could also be sub-divided in a different way, using the consultants as the focus. This prompted me to develop sub-divisions that related to 'when' the consultants received the feedback, which led to a categorisation of the feedback factors into four different sub-divisions related to the timing of feedback for consultants: Formative feedback (generated while the consultant was actually in the process of training); Summative feedback (generated when training was complete, either through formal or informal means); Own experience feedback (generated while the consultant was participating in training for their own professional needs); Self study (generated while the consultant was involved in an independent learning process). Table 5.2 illustrates the feedback factors assigned to each 'time' sub-division.

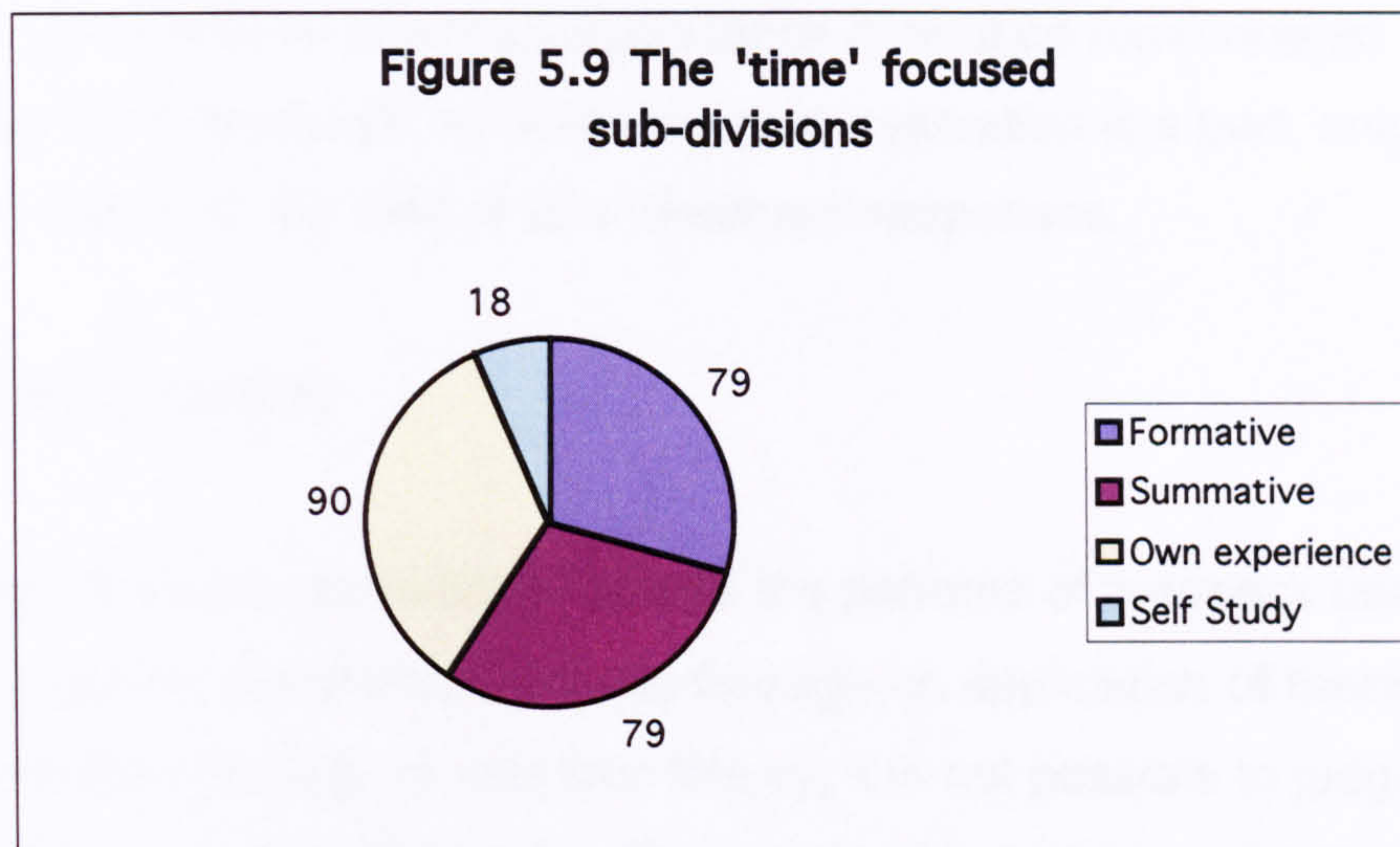


<b>Subdivision 1: Formative feedback</b>
Putting self in place of participants when observing others training
Observing participant response during training, and from these making judgements about the effectiveness of activities and training methods
<b>Subdivision 2: Summative feedback</b>
Receiving formal feedback following performance management observation
Comments from Reaction Evaluation forms
Observation of the transfer of elements of training into classrooms
Being requested to provide more training
Discussion with peers about own performance following training delivered with a partner trainer
<b>Subdivision 3: Own experience factors</b>
Observing other trainers at work and making judgements about effective behaviours and activities
Considering the effect of learning activities when attending a course as a participant
<b>Subdivision 4: Self study factors</b>
Making changes following own study, for example, reading about methods of training found to be effective for adults
Peer coaching feedback

**Table 5.2 The feedback factor sub-divisions organised with a focus on ‘when’ consultants received the feedback.**

Considering the feedback factors categorised according to these ‘time’ focused sub-divisions resulted in the distribution of total feedback responses accumulated from all the consultants being represented in Figure 5.9.





This highlighted how feedback factors related to the consultants' own experience appeared to be most influential, although formative and summative factors were also important. This result supports the finding that consultants may be more responsive to self generated feedback, and suggests that this feedback may be most significant when it is related to the consultants' own experience.

It is also apparent that by combining the sub-divisions of formative and summative feedback a finding can be generated relating to the significance of feedback for consultants when they are, or have been, involved in the action of delivering training. This enables a differentiation to be made between the importance of feedback received whilst consultants are involved in their role as 'trainer', and the feedback generated whilst they themselves are involved as 'learners', namely, 'own experience' and 'self study' feedback. Formative and summative feedback amounted to 60 per cent of total feedback responses within this group of consultants. There was no difference between formative and summative feedback, each amounts to 30 per cent of the total feedback responses.

It would appear that feedback generated whilst the consultant is involved in the delivery of the training process is of greater significance than feedback generated in other contexts, however,



within this picture of overall importance it must be remembered that summative feedback, of which reaction evaluation is a part, only represents 30 per cent of total feedback responses.

## CONCLUSION

Whilst it may be possible to uphold the patterns of feedback use amongst my sample consultants through an application of these quantitative findings to research theory, it is not possible to judge how far theory might hold true for this sample, or whether particular circumstances exist for this group, until the qualitative research evidence has been considered.

There is an apparent dichotomy between the finding that all consultants identify reaction evaluation as a 'frequently used' feedback factor, holding third place in the ordering of feedback factors, and the finding that consultants in general appear to respond more to 'self generated', 'motivational' and 'own experience' feedback factors. The sorting activity alone could not give a detailed and developed picture of the way in which consultants viewed the usefulness of reaction evaluation, or a clear indication of how linked to previous research the views of this particular group of consultants were. It was pivotal though in providing information relating to the differing extents to which reaction evaluation was used by the group as a whole, and by individual consultants within the group, and this information provided the basis for the semi-structured interview sample.

The semi-structured interviews were used in an attempt to develop a deeper understanding of what led these consultants to use or reject the feedback from reaction evaluations, and the findings from these interviews are considered in Chapter 6.



**CHAPTER 6**

**REACTION EVALUATION: KEY THEMES**

**FOR PNS CONSULTANTS**

**AN ANALYSIS OF THE QUALITATIVE DATA IN**

**THE MAIN STUDY**

## INTRODUCTION

The analysis of qualitative data, collected through the semi-structured interviews, develops three themes related to the use of reaction evaluation amongst the interview sample group.

To begin a process of moving from the specific to the general in the analysis of the qualitative data, I began by coding the data in each interview transcript.

The coding revealed occurrence of statements that emphasised consultants' views of the feedback factors they used to support development of training skills, and their perception of their training role. The patterns within the coding appeared to cluster the statements into eight categories:

Category 1 – Trainer context related statements;

Category 2 - Trainer feedback related statements;

Category 3 - Statements related to independently generated feedback and motivational factors;

Category 4 – Statements related to formal feedback (reaction evaluation);

Category 5 - Statements related to trainer perception of participants;

Category 6 - Statements related to trainer evaluation experience;

Category 7 - Statements related to the relationship between trainer and participants;

Category 8 – Statements related to the organisational nature of evaluation.

These categories are developed in detail in Appendix 6. In categorising the statements I decided to group those that related to the consultants' specific training context, to their beliefs about their role as trainers and to their experience (Category 1) together in order to give the potential to explore how important their specific working



context was in relation to their use of feedback. I then focused on developing a series of categories that related to their response to feedback; in general (Category 2), in relation to independently generated and motivational feedback (Category 3) and related to formal feedback which was a category focused mostly on reaction evaluation, as consultants had little involvement with formal feedback other than reaction evaluation (Category 4). The perceptions consultants expressed about participants' views, moods and actions in responding to training were grouped together (Category 5), and to consider what effect consultants' own experience of evaluating training might have on their response to evaluations they themselves received comments relating to consultants' own evaluation were grouped together (Category 6). Statements relating to the relationship between consultant and participant were grouped together to explore the potential influence of this on consultant response to feedback (Category 7), and the influence of consultant statements relating to the organisational aspects of evaluation, including consultant suggestions for improvements, were categorised separately (Category 8).

#### *DEVELOPING A VIEW OF THE RELATIVE IMPORTANCE OF EACH CATEGORY.*

A view of the relative importance of each category was developed by totalling how many statements each one contained, and the result of the initial analysis is shown in Figure 6.1.



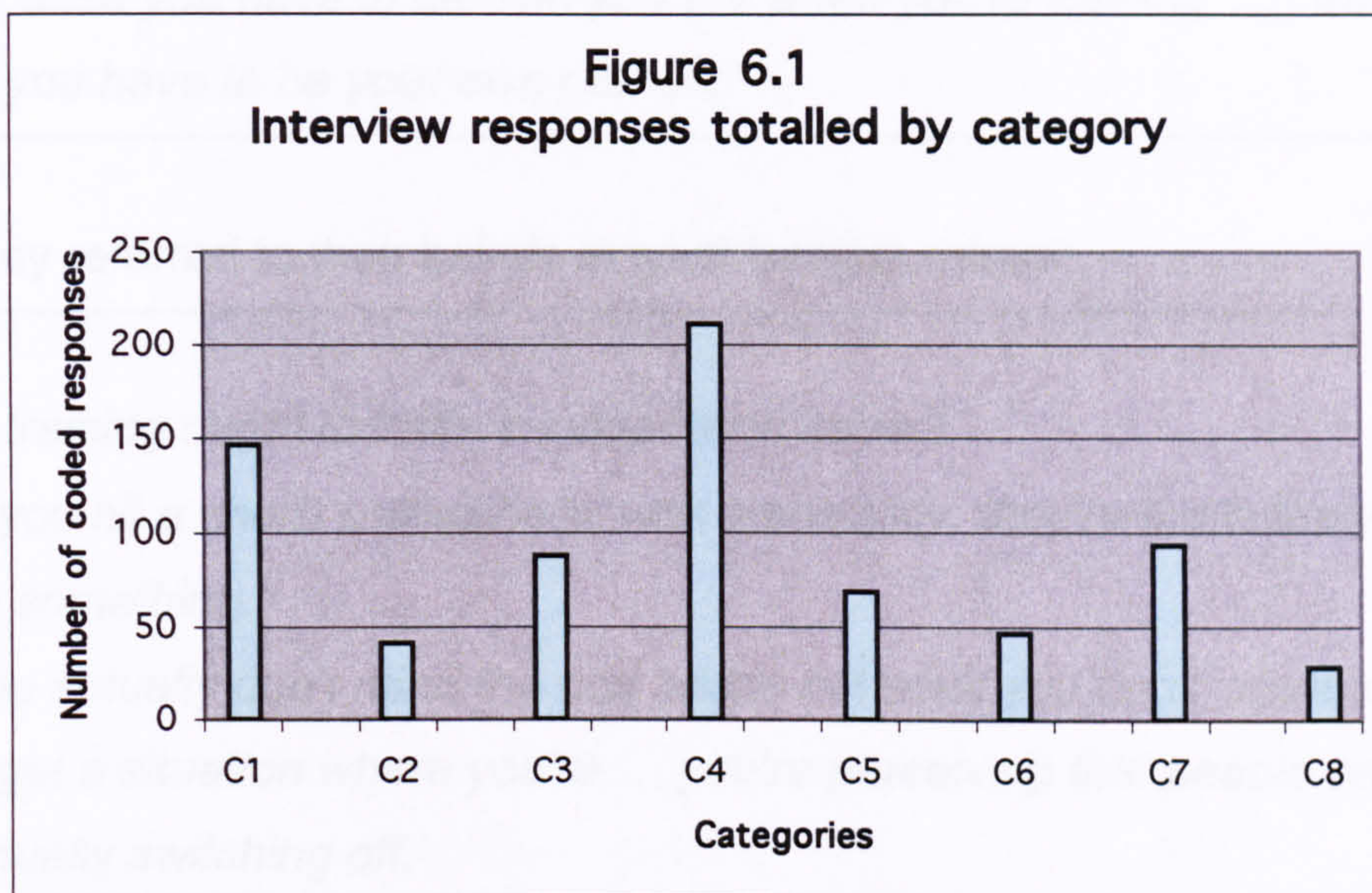


Figure 6.1 shows that responses coded into Category 4 (Statements related to reaction evaluation) accounted for the largest number of coded responses, although factors influencing this result would be that

- a) the interview sample was selected to include some consultants that the sorting activity indicated as using reaction evaluation a great deal, as well as those who rarely used it,
- b) the interview schedule was designed to ask respondents about the use of their most frequently used and least frequently feedback mechanisms, so both those consultants who used reaction evaluation and those who did not were drawn through the questioning to talk about reaction evaluation.

However, Figure 6.1 shows that consultants also talked a great deal about the training context (Category 1) and what influenced them as trainers. Here consultants reflected on training culture, trainer experience and trainer persona.



*'You don't want to be someone else and you can't model yourself because you have to be who you are when you're training ... I think ... you have to be your own person.'*

They referred to their beliefs in what training meant:

*'...training ought to have a longer term impact.'*  
*'If you hit a chord somewhere, with somebody, they're more likely to do something.'*  
*'you actually don't mind the odd bristle but what you don't want to do is get a situation where you're ... you're perceiving that people are actually switching off.'*

They also referred to their shared background as teachers, reflecting on the comparison between the activity of training and that of working as teachers in the classroom.

*'I suppose it's like it is in the classroom ... I always used to put myself in the place of the children before I started the lesson and think 'Well, what are they going to get out of this?''*  
*'...it's a bit like teaching, it's that learning objective, 'Now, were people clear about why they were here today?' 'Were they clear about what difference this was going to make?''*  
*' ... I think I'll continue to be like it to be honest because as a teacher I was like it.'*

This comparison was regardless of their length of training experience, and was found in interviews where the consultant had seven years experience away from the classroom, and where a consultant had only one year's experience of being role a PNS consultant and trainer.

This was also the category where consultant references to making changes in training behaviour were included.



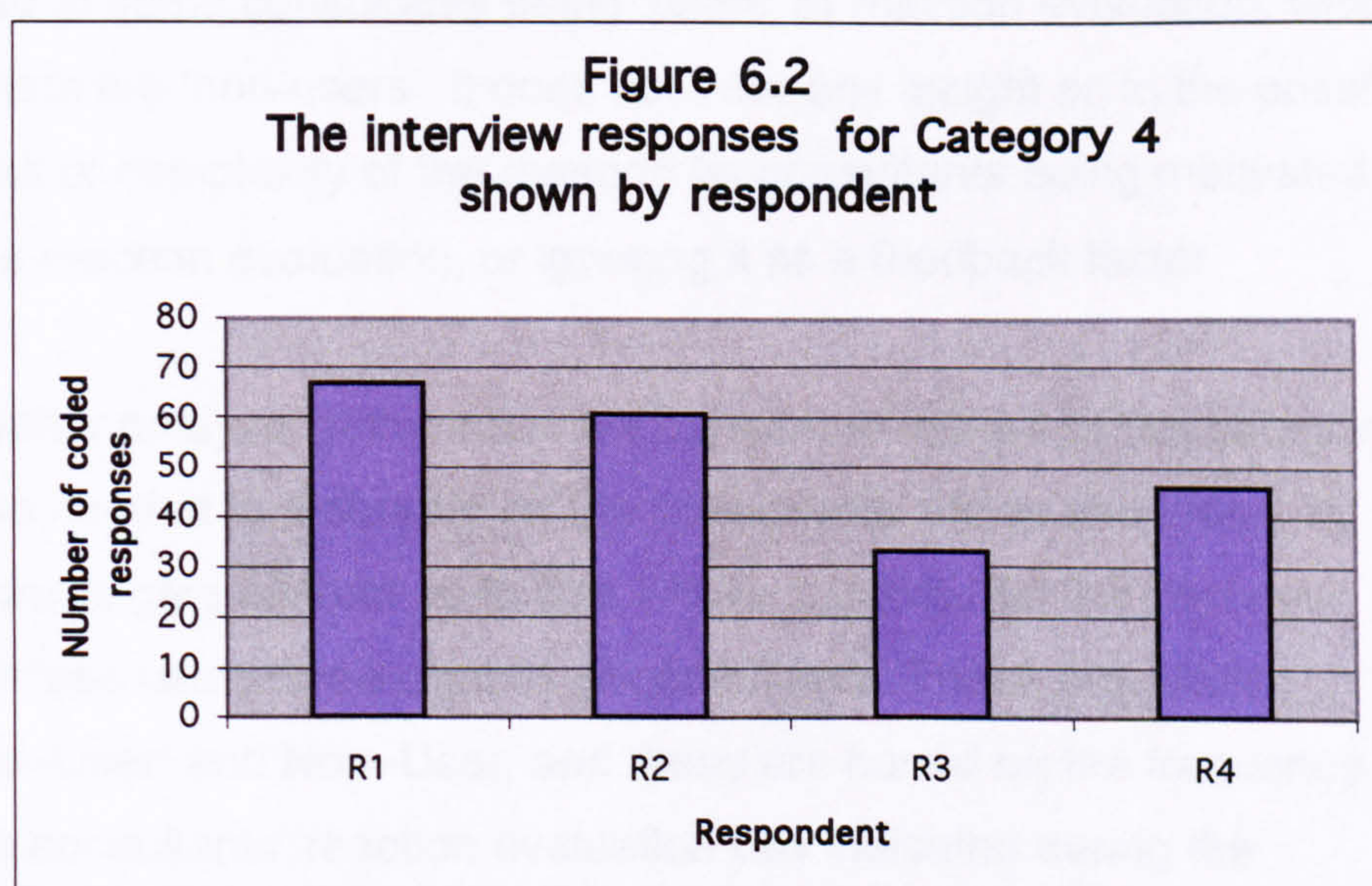
*'It's going to be whether you give further explanation, whether you allow more or less time.'*

*'You may have missed something out and that's been highlighted for you might be very helpful then in planning another course.'*

*'...because my own pace perhaps could be slow and I had to think of all of the other learning styles in the room, so working with different trainers on how they ...are aware of the participants in the room ... has made me think about the variety I put into my own training.'*

### REACTION EVALUATION - USERS and NON USERS

The sorting activity had revealed that, in the sample group of consultants, there was a distribution of use of reaction evaluation, from consultants who identified reaction evaluation as an important feedback factor, through to consultants who did not assign great importance to reaction evaluation. When the totals for coded responses in Category 4 (Reaction Evaluation) are considered for the interview sample consultants as individuals it results in the distribution shown on Figure 6.2.





Here the chart has been arranged so that interview Respondent 1 is the consultant showing most frequent use of reaction evaluation during the sorting activity, and Respondent 4 is the consultant who indicated least frequent use of reaction evaluation.

Even taking into account the fact that some emphasis in the semi-structured interview schedule was placed on probing reasons for use or non-use of reaction evaluation with all interview respondents, the chart shows that Respondent 1 still records the highest number of responses related to reaction evaluation. However, Respondent 4 does not record the lowest number of responses, a fact that may relate to the emphasis of the interview schedule; encouraging Respondent 4 to talk about the non-use of reaction evaluation. This outcome could be a result of the strong likes and dislikes displayed by Respondents 1 and 4, placed as they are at either end of this continuum, but the reality of this supposition can only be explored through a more detailed analysis of the nature of the statements they made related to reaction evaluation.

In addition, this analysis reveals nothing of the reasoning that could lead to some consultants being 'users' of reaction evaluation, whilst others are 'non-users'. It does not offer any insight as to the possible links or complexity of the reasons for consultants being motivated to use reaction evaluation, or ignoring it as a feedback factor.

Further analysis of the interview transcripts related to this category was needed to elaborate on the consultants' views and ideas. In order to give a structure to this, I have approached the interview analysis using three classes of consultants. These are: User; Mid-User; and Non-User; and these are based on the frequency of the consultants' reaction evaluation use indicated during the quantitative sorting activity.

## **WHAT DO CONSULTANTS SAY ABOUT REACTION EVALUATION?**

Initial analysis of responses in Category 4 revealed that aspects of reaction evaluation occurred in the interviews of all three classes of consultant (Appendix 7 shows these Category 4 codes highlighted). Because it must be recognised that, through the focus of the questioning, the interview schedule was subject to reinforcing the occurrence of some aspects of reaction evaluation with all respondents, further analysis of the comments within these repeated codes was undertaken. It was this further analysis that suggested four themes related to reaction evaluation threading through the consultants' professional dialogue.

These themes were:

- The quality and nature of the information relayed to consultants through reaction evaluation;
- The role of reaction evaluation within the training organisation;
- The usefulness of rating-scale grades and open-ended question comments in reaction evaluation for consultants' own training development;
- The nature of participant engagement with the reaction evaluation process, and with learning.

These themes reflect the link to the interview schedule (Appendix 5), focusing questions as it did on the usefulness of rating-scale grades and open-ended response question comments for the consultants' own training development, but what is also generated is a broadening of the dialogue related to reaction evaluation amongst this group of consultants; represented by their remarks related to the role of reaction evaluation within the training organisation and the nature of participant engagement.



The themes of the initial study: *satisfaction* and *trustworthiness*, are again reflected through this main study interview sample, with both the themes of 'quality of information' and usefulness of rating-scale grades and question comments' indicating a particular link. It is also apparent that these initial study themes have an influence within the themes of 'organisational role' and 'the nature of participant engagement in learning'.

Throughout the analysis of the data, during the next section of this chapter, I will seek to clarify the way in which these two central initial study themes are referenced by the four themes of the main study. Initially, each of the four themes will be considered in turn, moving towards clarifying key concepts later in the chapter.

**Theme 1:**

*The quality and nature of the information relayed to consultants through reaction evaluation.*

Consultants considered that the quality of the information they received from participants' reaction evaluation forms was related to the ability of participants to evaluate training thoughtfully.

<b>User</b>	<b>Mid - User</b>	<b>Non - User</b>
<i>Sometimes you look down and actually ... you think well, really I'd like to have known a bit more about why you thought that. So they say 'Which was the most useful part of the course?' ... whatever it was, you know ... 'the discussion' or whatever. You think well 'Yes' but that's a bit like the question's Why? And there isn't the 'because ...' there isn't that developmental bit about why they think it's useful ... because that's what you really want to know.</i>	<i>They don't know ... I don't think ... what kind of thing ... to write because they don't know a) what we're going to do with it and b) what they're for because it just says 'What was good?' 'What was bad?' They don't know what we want to know. Why would they know what we want to know?</i>	<i>Sometimes ... sometimes... you get people who are clearly being sensible and thoughtful and they are actually trying to think ahead ... sensibly about where this particular training event fits into something that they're working on which is key ... and where they want to go with it next and sometimes you get that impression. I wouldn't say it's common and I think again ... I think in some ways that's our fault. Because ... historically we've not put the onus on people to see this as a part of a sequence of them engaging as a professional in a learning experience of which this is one part.</i>

Both mid-user and non-user suggested that the lack of quality information may relate to a missing dialogue between trainer / training organisation and participant. This highlights issues revealed in studies like the FTDL Project (2003) of how for feedback to have capacity to impact there needs to be ownership amongst the



contributors. However, consultants also suggest that some responsibility for the quality of participant information needs to be taken by trainers / the organisation to encourage participants to see their training as part of a learning sequence. They also suggest that the wording of the reaction evaluation questions does not aid participants to construct answers appropriate to supporting the development of the consultant's own training skills.

This view is also reflected in comments related to the nature of the information passed to consultants from reaction evaluations.

<b><i>User</i></b>	<b><i>Mid - User</i></b>	<b><i>Non - User</i></b>
<i>It actually gives you some really important information even about those things which are beyond your control. So ...so I quite like that.</i>	<i>But I find that the 'What was bad?' bit tends to be more about their ... feelings about the day generally, rather than about anything that I can necessarily have an impact on.</i>  <i>I don't think that's necessarily a reflection on ... the quality of your training. It's actually a reflection on the quality of the audience at that particular time.</i>	<i>So for me as a trainer it offers little back, they're very little about delivery as me as a trainer in some ways, they're often, you know, 'I didn't like such and such'.</i>  <i>...it's a bit like all judgements ... it's where that person comes from in terms of being trained</i>

All respondents felt that the reaction evaluation gave them information that was not necessarily related to anything within the control of the consultant. The response they had to this differed across usage classes; 'user' examples seeing that the information was important even if outside the consultant's control, and mid and non-users reflecting a greater divergence between what participants felt and the usefulness of the information, at a personal level, for the consultant. Layder (1998) suggests that tutors hold power within the student – tutor relationship, and amongst consultants this power

differential may be more pronounced for some, and therefore reflected in their view of the usefulness of the participant feedback they receive.

*Theme 2:*

*The role of reaction evaluation within the training organisation.*

Not all classes of consultant talked about reaction evaluation in terms of its organisational role. It was evident from coding that the non-users of reaction evaluation made many more comments about the role of reaction evaluation for the organisation, and their comments reflect a questioning of the organisational role of reaction evaluation, both in terms of what it might offer consultants on a personal level, and what it might offer the organisation in terms of evaluation of training impact, or quality assurance of consultants as trainers.

<b>User</b>	<b>Mid - User</b>	<b>Non - User</b>
	<i>I think personally, even though we've got to have ... God, you've got me started now ... even though we've got to have ... some sort of formalized way of doing it so that everybody's doing the same</i>	<p><i>Whether we still ... somebody needs some numbers somewhere to judge ...I think it's about evidence gathering that somebody was in the room perhaps ...</i></p> <p><i>Is it just a paper exercise, and ...is it the best way that people are being offered to ...to evaluate their courses?</i></p> <p><i>I sometimes get lost in what the purpose of the evaluation form is.</i></p> <p><i>I'm not sure it adds to the quality of what's being offered through us as a service in terms of training and I'm not sure it recognises who's good at training and who's not either.</i></p>



There is an acceptance that a system of evaluation that is the same for all those involved with training is needed by the organisation, but the purpose of the evaluation for the organisation appears to be seen by the non-users as a predominantly administrative activity, which has little influence on either the participant's learning, or the consultant's continued professional development. Non-users felt that with many courses there was not the capacity to follow up training or reaction evaluation comments.

***Non-user***

*And if there is (capacity to follow up) we're not always directly involved with that follow up mechanism.*

This again reflects a feeling from some consultants that reaction evaluation is a method designed primarily for the purposes of others than for the consultants themselves. A view emphasised by comments from all classes of users related to the fact that the only course evaluation used was reaction evaluation, which by its very nature had to be conducted at the end of the training session.

<b><i>User</i></b>	<b><i>Mid - User</i></b>	<b><i>Non - User</i></b>
<i>...often there's not much time to do it, you're rushing off at the end ...</i>	<i>A lot fill in the grades on the front and don't fill in anything on the back because they just want to leave ... which makes you think, well, actually should that evaluation process be ... a bit more rigorous than that? In terms of having them at the end of each session? Probably.</i>	<i>Because when we deliver these at the end of the day people are tired and want to go home, and they don't want to do it anyway, ...</i>

Consultants perceive that the information received from reaction evaluation may be biased due to it coming at the end of the training session, when participants are tired, and have perhaps already moved mentally out of training mode as the urge to get home takes over. This perception can be balanced however against the value of reaction evaluation for providing an immediacy of response.

**User**

*I like the fact that it is an immediate sort of thing ... sometimes it's how you feel immediately after something ... that really motivates you as to whether you do anything about it.*

The picture beginning to appear here is one where consultants recognise the limitations of reaction evaluation, but also articulate awareness of some valuable aspects of the evaluation system. Simons (2004) stresses how individual professionals must want to see the relevance of evaluation evidence before transferring it to their own setting. The extent to which consultants view the valuable aspects of reaction evaluation as having relevance is further analysed in Themes 3 and 4.

**Theme 3:**

*The usefulness of rating-scale grades and open-ended question comments in reaction evaluation for trainers' own training development.*

The dichotomy of response, between awareness of the limitations of reaction evaluation and the recognition of the valuable aspects of the feedback, is further developed when the reaction evaluation rating-scale grades and open-ended question comments are analysed and links made between the trainer perception of these and their inclination to develop their training behaviour as a result.



### *The usefulness of rating-scale grades*

When interviewed, consultants had an initial 'reaction' to the usefulness of rating-scale grades, varying across the classes of user. The 'user' demonstrated a very personal response relating grades to their feelings about how well they had conducted training. The mid-user focused on the outcome of grades from participants, and the perception of how participants arrived at these. For the non-user the grades were considered to provide clear information about certain aspects of the course, without reference to either their own personal response or any perception of how participants made decisions about which grades to use.

	<i><b>User</b></i>	<i><b>Mid -User</b></i>	<i><b>Non-User</b></i>
<i><b>Grades (reaction)</b></i>	<i>So therefore ...if I got Ones and Twos I'd think fine. If I got Fours and Fives then I would see that as being very, um, er, you know ...'Oh dear! What was I ... That must have been dire!'</i>	<i>You tend to get 'Oh, that's One, definitely' or 'God, that's Five' You don't ... or ...it was average, and it was just (gestures marking evaluation sheet) 'That'll do, that'll do.'</i>	<i>The grades talk very clearly about to what extent things were made clear, and how good the materials were and that sort of thing.</i>

Following their initial reaction consultants reflected further about what the grades meant and threads that developed reflect the belief that, because participants are approaching the grading from different experiences of the training, and backgrounds preceding the training, the value of the grades lacks potential to be an accurate reflection on the quality of training.

	<b>User</b>	<b>Mid-user</b>	<b>Non-user</b>
<b>Grades</b>  <b>(reflection)</b>	<p><i>I do tend to think that the actual numerical grade is not very precise because it's not telling you exactly ... you don't know where they're coming from when they give you that grade. ...It's too stark.</i></p> <p><i>It's a general thing so that either it's gone OK, or not so well, or it was in the middleish.</i></p>	<p><i>So you'll get One for quality of presentation, One for quality of handouts ... Impact on my work in school? Three (pause) that's just ridiculous (laughs) how can it be Three? If it was good quality you should be saying 'Yes, I'll use it.'</i></p>	<p><i>I think it's utterly questionable and arguable given that ... when these things are filled in, people are coming at it with such varied approaches, um, that it's not meaningless, but it's almost meaningless.</i></p> <p><i>So it's nice when they're good but we just have to be honest about what it's really telling you ...which is not a lot.</i></p>

Non-users see the grading process as imprecise, lacking clear criteria statements for grades to support participants in grading their training experience; criteria that would be needed to ensure a consistency of grading and more valid grading outcomes.

<p><b>Non-User</b></p> <p><i>'When you're given a set of criteria on which to grade your assumption about what's good, very good, excellent and so on, we haven't got that defined in front of us in order for you and the person next to you to make any valid correlation between what you say is good and what they say is good, ...'</i></p> <p><i>'...somebody's 'good' could be somebody's 'satisfactory' ...'</i></p>
--

Non-users expanded the concerns that they had with the validity of grades. They explained that they felt that, because of its structure,



the section of the reaction evaluation that used grades was trying to provide information for unrelated and incompatible functions of the training. Divided into three sections: Purpose, Structure and Venue, the elements of the training evaluated through the graded section are shown in Table 6.1. Ultimately, each course is given an overall grade, arrived at by averaging the grades on each section of the form, and then averaging these section averages.

**Table 6.1**

**The rating-scale section of the reaction evaluation form used by the PNS consultant sample.**

Each statement is graded between 1 – 5

1 = Very Good    2 = Good    3 = Satisfactory    4 = Unsatisfactory    5 = Poor

<b>Purpose</b>
<i>a) The extent to which the objectives of the course were made clear</i>
<i>b) The extent to which the objectives of the course were met</i>
<i>c) The extent to which the course will have impact on your work</i>
<b>Structure</b>
<i>d) The extent to which the training activities sustained your interest and helped to achieve the course objectives</i>
<i>e) The quality of the presentation and delivery</i>
<i>f) The usefulness of the support materials provided (if none, please mark N/A</i>
<b>Venue</b>
<i>g) The venue and facilities</i>
<b>Overall</b>
<i>h) The session was ...</i>

Non-users explained that the combining of grades that attempt to evaluate customer care, for example, venue quality, with those evaluating the quality of the training experience, to form an overall average grade for the training event reduces the relevance of the

overall grade for consultants wishing to use it to inform their own further development.

*Non-user*

*'And me as a trainer ... I had no ... I didn't choose the venue and I also don't choose the 'What impact will this have back in school?'*

*'It's very little about me'.*

*'Infact there's a fair number that as a trainer actually in the session ... there are other factors that go into the number crunching that I have no impact on.'*

Hounsell (1987) suggested that feedback will not be given considered attention if it is felt to be insignificant or invalid. The findings related to these consultants, who saw the nature of the elements graded as being very little directly about them, or their practice, reflect Hounsell's research, and linked to this the theme of 'choice' threaded through the interview transcripts. Consultants felt that some aspects of the course were outside their control and that the evaluation of these was an evaluation of the 'choice' of others, for example, the selection of the venue by Children's Services' administrative staff, or the choice of the menu at the venue by catering staff. It was considered that to have these included as part of the overall average grade failed to give a clear value to the training in relation to the consultants' role.

In addition to this, the effect of the element of 'choice' on the part of the participant was also a factor of concern. This point being exemplified by comments related to the grades assigned to 'The extent to which the course will have Impact on your work.'

Consultants appear to voice the opinion of Tesluk *et al* (1995) that trainers cannot be accountable for training effectiveness, based on their perception of participant response to training.



*Non-user*

*'...the only one at the moment that looks at 'What am I going to do?' well ...'I (the participant) could choose not to do anything so I'm going to give it four' ...what does that really tell us?'*

In this comment the consultant touches on the issue of the extent to which rating-scale grades can ever be valid, controlled as they are by the feelings the participants have about training and the way the participant controls the 'choice' to grade. The participant may 'choose' to do nothing with the training and may, even before the training has started, 'choose' not to have their interest sustained by the course activities. This 'choice' may be the result of a lack of understanding, but it could also relate to a lack of emphasis placed on the role of the participant as an active partner in the training.

*User*

*'Four, for relevance to their work or whatever, because ... in their understanding of something, um, they think it's not relevant.'*

Dixon (1989) argued that the reaction evaluation reinforces this 'passivity' of participant by focusing the statements for grading towards to the course, trainer and venue. Even the open-ended question requesting comment on impact on participants' work does this through the wording, focusing on 'the course' rather than on the participant. The findings in this section of the analysis would appear to suggest that this feature of the reaction evaluation does not escape the notice of consultants, and has an impact on the way in which they consider the relevance of the evaluation outcomes for their own development. The issues of participant passivity during training are explored further in Theme 4: The nature of participant engagement with the reaction evaluation process, and with learning.

The fact that the participant controls the ‘choice’ to grade according to their own personal criteria, experience and needs, unreferenced to anyone else, means that for most consultants the grades, through their unreliability, lack potential to inform the consultants’ own personal practice. And the overall average grade for the course is seen as presenting a view of training unrelated to the consultants’ own work, combined as it is with other elements of the training.

*The usefulness of open-ended question comments*

Whilst respondents viewed grades as lacking the potential to provide precise information about the training, comments written in response to the open-ended questions were recognised as providing participants with the opportunity to be more specific about aspects of the training they had received.

**Table 6.2**  
**The open-ended question section of the reaction evaluation form used by the PNS consultant sample.**

1. What was the most effective learning activity today?
2. Which aspects of the programme went least well? Please elaborate:
3. Outline below how what you have learned will influence your work in school.
4. Would a follow up session to this course be useful? If so, for what purpose should it be used?
5. Are there any other areas in which you would like training?
6. Any other comments?



	<i>User</i>	<i>Mid-user</i>	<i>Non-user</i>
<b>Comments</b>	<p><i>But the comment is justifying ... it's saying why they think that, so from my point of view, the comments in some ways are much more helpful because they might actually highlight specific things which are helpful and why.</i></p> <p><i>It's about picking on particular things that you know people liked rather than just saying 'Well it was great.'</i></p>	<p><i>And when people do fill in the comments at the back ... it's either because you've done a really good job and they want to tell you that, ...</i></p> <p><i>Or sometimes they recognise that you've dealt with an issue like 'Thanks for doing that ... that must have been difficult.'</i></p>	<p><i>The frustrating thing about comments is that they very rarely match the grades ...</i></p> <p><i>...what the comments tend to do is they try and get people to synthesise their thinking so taking the day as a whole ...and people clearly, in many instances, contradict themselves on either side of the paper ...</i></p>

Having specific feedback to training was important to consultants, although the comments intended as justifications of the rating-scale grades were not always considered to match. This contradiction, sometimes demonstrating rating-scale grades that were more positive than comments, at other times comments that were more positive than grades, appeared to frustrate the non-users. This frustration could stem from the fact that the organisational analysis of the reaction evaluation is based entirely on the rating-scale grades. Where there is a contradiction between grades and comments the capacity of this analysis to portray an accurate picture of the training is put into question. One consultant expressed dissatisfaction that the judgements made about trainers were based on grades, but that this did not take into account the inconsistencies between the grades and the comments on the reaction evaluation forms.

*It's kind of irritating me a little bit, actually because we are judged on that too.*

It also appeared that writing comments was perceived as being a result of the extremes of reaction to training, either very positive or negative. This links to the consultants' perception that participants lack the ability to write pertinent comments, and that the timing of the reaction evaluation precludes participants writing thoughtful comments as they are rushing to leave the training.

Within this background however consultants do acknowledge that comments will lead to them developing their own training.

<b>User</b>	<b>Mid-user</b>	<b>Non-user</b>
<i>Sometimes some of those irritated comments can be very perceptive about things that you perhaps haven't realized as a trainer that you've missed out and should have done ...</i>	<i>And I tend to ... and I tend to look at two boxes which is the 'What was good?' 'What was bad?' ...bit.</i>	<i>We do read these, and that's true – we do! Um, and it will help us to modify the training that ... you know ... and we do, in some instances, especially when you're running something ten times.</i>
<i>And where people have said that they haven't found a bit helpful, we've said 'Well ... what might we do to change that?'</i>	<i>Interviewer: and have you changed training as a result?</i>  <i>Yeah, because most of the time they're justified</i>	

This response was balanced with professional judgement, particularly in examples where the same course content was commented on differently by different participants. Here consultants viewed the participants' breadth of experience as acting to limit the attention they would pay to comments, and any subsequent action they should take to change training. Schwandt (2000) comments



that, when making judgements about how to act, account should be taken of ‘scientific evidence’ where available, but this should not supplant professional knowledge. It would appear that these PNS consultants have a very positive view of their own professional knowledge, and that the balance clearly weighs more to the side of this than to other evidence expressed in reaction evaluation.

<i>User</i>	<i>Mid-user</i>	<i>Non-user</i>
<i>I mean with all these things I think you have to read in to them. You're not disregarding them but what you're saying is that they are written from that particular person's perspective ... and you think well actually as a trainer then you have to balance what you wanted to get out of it.</i>	<i>I'd look at it and think 'Well ... more than one person has said that and actually it was abit rushed, so I will take out that instead.  So I do go back and change as a result of it but depending on the comment ...</i>	<i>If on Session One people are saying, you know, there was too much in here, and we'd already said there was too much in here because we knew there was, ... We do take on board what they say especially if they're ...if they're all going one way.</i>

This link between professional response and participant comments is exemplified with particular examples of changed training. Sometimes consultants sited specific examples of comments that had led to changes being made.

*Like I did a \*\*\*\*\* one and there wasn't anything in Foundation Stage and I know that because I glossed over it nicely, because I don't even know Foundation Stage really, but one of the comments was 'There was nothing for Foundation Stage'. It made me think Um, OK, hand's up and put something in about it.*

More often consultants referred to general aspects of training related to change.

<b>User</b>	<b>Mid-user</b>	<b>Non-user</b>
<i>...so you have planned the course thinking that you've covered all the things that they want, but actually you may have missed something out and that's been highlighted for you ... well, there's too much talking in it and not enough action or whatever ...</i>	<i>I have changed courses as a result of bad reviews ... 'There isn't enough of this.' Or 'I wanted more of that' ... they're useful because I can change what I do the next time because of that.</i>	<i>If on Session One people are saying 'There was too much in here!'</i>

From these examples, it is the participant comments related to change of content and structure of the training that appear to be emphasised. It would appear that consultants respond to evaluation comment when suggested improvement relates to development of course content, either to make additions or remove content. There is also some suggestion from the 'user' of reaction evaluation that the interactivity of the training session structure might be an aspect changed following participant comment.

However, it was not evident from interview transcripts that the consultant's own style of delivery was an aspect of training that they considered changing as a result of evaluation comments. This could reflect the consultants' view of personal training techniques as being too ingrained to change regardless of comment, or that they feel that participants do not have the 'right' to mention personal style. It could also reflect the fact that participants actually rarely comment on personal training style, and certainly there were responses within the interviews where consultants indicated that they felt that participants might err on the side of caution in their approach to reaction evaluation grading and comments.



*Mid-user*

*'...because if it's an alright course' you put Twos because you don't want to upset the person's evening. Do you know what I mean? It sounds ridiculous but ... it's probably true.'*

*User*

*'You know we're nice people as teachers ... we don't want to hurt people's feelings on them.'*

Whilst this perception may be based on the consultants' own experience of how they themselves grade and comment on training when they are participants, it does also serve to suggest that grades and comments may be considered by consultants as unreliable because the sensibilities of the participants have caused them to be mediated in some way. This belief would in turn reinforce the consultant response to comments:

*User*

*'Yes, well you've got to take it with a pinch of salt.'*

These factors could act to augment the consultants' professional belief, and influence their consideration of whether or not to take action in response to comments made by participants, skuing the balance in favour of consultants making the professional decision to view comments as not sufficiently relevant to instigate change. This aspect of the trainer / participant relationship is developed further in Theme 4 which develops the way consultants view the nature of participant engagement in terms of evaluation of training, and with learning.

*Theme 4: The nature of participant engagement with the reaction evaluation process, and with learning.*

The consultants' perception of the nature of participant engagement in the evaluation process was consistent across all levels of reaction evaluation user.

<i>User</i>	<i>Mid-user</i>	<i>Non-user</i>
<i>So, yes, I don't think ...some people do, but it's the occasional person isn't it, who does that.</i>	<i>But I think that the person missing from the evaluation is the person who has received the training.</i>	<i>...what you tend to get is a kneejerk reaction when they feel that they want to write something down ...I think if I'm honest I don't think that we're sometimes sufficiently robust ... In a sense what we don't do is to start off the day by saying, you know, 'When you evaluate this course at the end of the day we'd be grateful if you didn't include things that you could have had some impact on during the course of the session.'</i>
<i>Interviewer: who enters into a dialogue</i>	<i>I think, people think that there's an expectation that you should put a certain grade ... I think there's almost an unwritten rule ... I don't know if that's true but ... you kind of get that feeling don't you that ... because if it's an 'alright course' you put Twos.</i>	
<i>Yes, into the real spirit of the evaluation.</i>		

Consultants appeared to view the participants' engagement with the evaluation process as partly reflecting a lack of any partnership between the trainer and participant; a situation that led to a lack of dialogue within the evaluation and which hinted from the consultants' viewpoint of an abdication of responsibility by the participant of being part of the training process. This was further developed as the consultants began to reflect on the nature of participant involvement with learning.



<b>User</b>	<b>Mid-user</b>	<b>Non-user</b>
<i>They haven't either read the objectives properly and they don't really know what the course is designed to do, and therefore they're expecting something and they get something else, or ... they haven't really taken on board exactly what the objective is and what that means in terms of their practice.</i>	<i>I think it's about a culture shift ... I think it's about ... people don't evaluate ... people don't see them coming on a course as being about them learning.</i>  <i>They don't come with that kind of 'I'm going to go and learn something.'</i>	<i>I think we've got a ... you know we've got a mismatch here between active and passiveness in terms of the fact that we've got a group of people who regularly attend training who are incredibly passive. They're not really interacting with the process ...</i>

This view that there is a divide between participant and trainer, where participants are passive rather than active in the learning process is clear across all classes of consultant; extending from the participant failing to engage with the course objectives when choosing an appropriate course to match their learning needs, to a lack of engagement with the learning process when attending training.

This appeared to reinforce for some consultants the feeling that participants saw the consultants' role as 'doing' training to them, and that the role of the participant should be to resist this.

**Mid-user**

*Consultant: They're seeing it as a ... 'Come on then, you've got an afternoon. Keep me awake.'*

*Interviewer: Like an entertainment?*

*Consultant: No, not as bad as entertainment but you know what I mean? In that kind of ... it's almost still, from a lot of people, almost like a challenge, you know?*

*Mid-user*

*I think it gives them (participants) ... a power shift ... a power shift's probably the wrong word, but it gives them more of a credence to say ... this is what I think of you and what you're doing to me, as opposed to 'I'm part of this process ...'*

There was a feeling that participants could be influenced by others on the course, or on their table, and that reaction evaluation sometimes reflected this rather than the participants' individual views.

*User*

*It's that herd instinct isn't it ... of what everybody else on your table put ... so I do think there's an element of that.*

And the feeling was expressed that participants focused on training as a 'deficit model', providing the parts missing from the teachers' professional understanding rather than a partnership in learning between trainer and participant.

*Mid-user*

*and that we're supposed to be like telling them ... almost like a punishment ... 'I've got to come because I'm not very good at this.' Not ... 'I'm going to come on this course because I want to learn about it.'*

It is interesting that there is even a distrust of participant comment when that comment is positive about training, and this is centred around the perception consultants' have that the collective 'personality' of teachers makes them a generally amenable group of people.

*User*

*You know, we're nice people as teachers. People don't want to spoil your weekend.*



*Mid user*

*They don't perhaps want to hurt your feelings.*

The view that even positive comments can not be treated as an honest reflection of the training, because they might have been mediated by participant concerns to present a positive comment, highlight the extent of the distrust of this form of feedback.

These perceptions of participants, expressed by all classes of reaction evaluation user, perhaps go some way to placing in context the lack of faith some consultants have in reaction evaluation as a means by which to measure their own personal training performance, and its capability to inform the development of their training skills.

However, there is also evidence that the consultants recognise that there is a role they could play in increasing the levels of participant engagement in learning.

<i>User</i>	<i>Mid-user</i>	<i>Non-user</i>
<i>They will want to know 'Why?' I think and want to have more ... foundations for the things that they're doing rather than just saying 'Do it!'</i>	<i>... I think there should be more emphasis given to ... where were you before you started? And what are you going to do as a result of what you've learned today? Rather than how good you think the person (trainer) was.</i>	<i>What I think we need to do is to require people to interact more positively with the process of being trained ... than we do at the moment.</i>  <i>They're not really interacting with the process, and that, to a certain extent, is our fault, but I think that we can require a greater level of interaction by the way we approach things and I think we should because the being done to ... you know doesn't work</i>

This suggests that whilst consultants may express a lack of faith in reaction evaluation, they do believe in the relationship between trainer and participant, desire feedback on training and show interest in developing ways to increase the interaction of participants, thereby making training more effective. Consultants appear to acknowledge Barnes (2001) view of how different approaches to teacher CPD change the participant – consultant relationship. It suggests that they accept that they have a responsibility for improving interaction with participants, reflecting that sometimes participants might respond in the way they do to reaction evaluation because they lack clarity about their role in the evaluation process. Some comments made by consultants expressed their understanding that participants may feel that the completion of reaction evaluation forms has little or no value.

*Mid-user*

*'and I know that there's a rider that says that we use them in relation to other courses, but a lot of people don't think that we read them for a start and they think ... 'well if they (trainers) do read them ... what exactly are they going to do with them?'*

Again the perception on which comments like this from consultants are based could be as a result of their own personal experience, and there were examples where consultants expressed a recognition that their own evaluation of training could be found wanting.

*'...how do we respond to what we've done? How do we evaluate? Because we do it as well ... we just kind of go 'Arh ... that was OK'. I mean at national training we just go 'Yeah, that's fine ... liked the bit when we talked about phonics'. 'Liked!' I mean I wrote that ... 'liked the bit when we talked about phonics' (Interviewer laughs at interviewee's tone) ... and you think what does that tell anyone? Nothing!'*

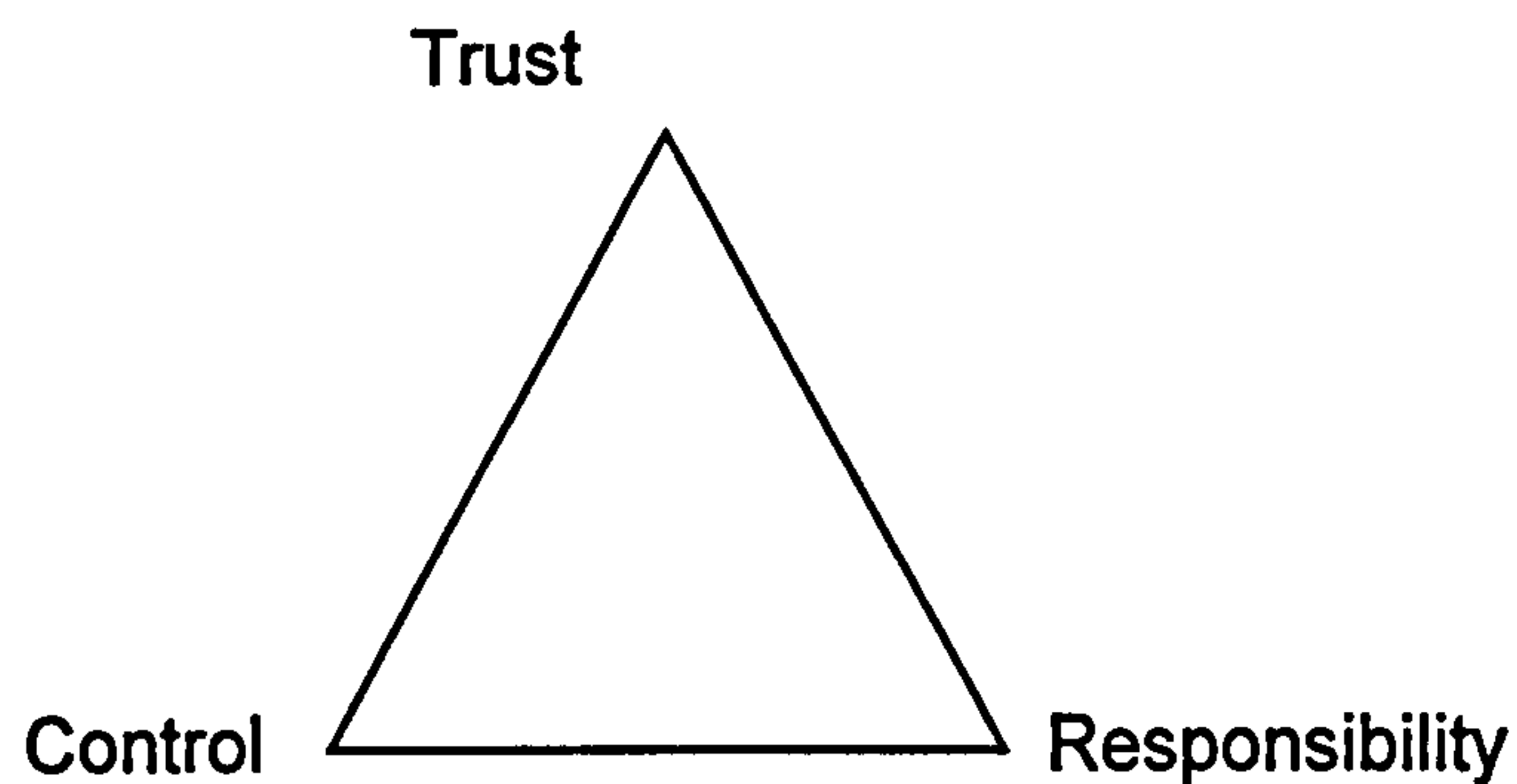


This suggests that consultants recognise that evaluation is not a straightforward activity, and that they, through empathising with participants, don't necessarily view the relationship between participant and trainer, as one of 'expert – learner.' There is a partnership view to training teachers in this PNS context that although perhaps not fully formed is desired by consultants, and consultants recognise, as Barnes (2001) suggests, that teachers through other forms of CPD may become experts in particular areas. However, at this stage this is measured against evidence that consultants use their 'professional judgement' to make decisions to change or not to change training, irrespective of what participants might say.

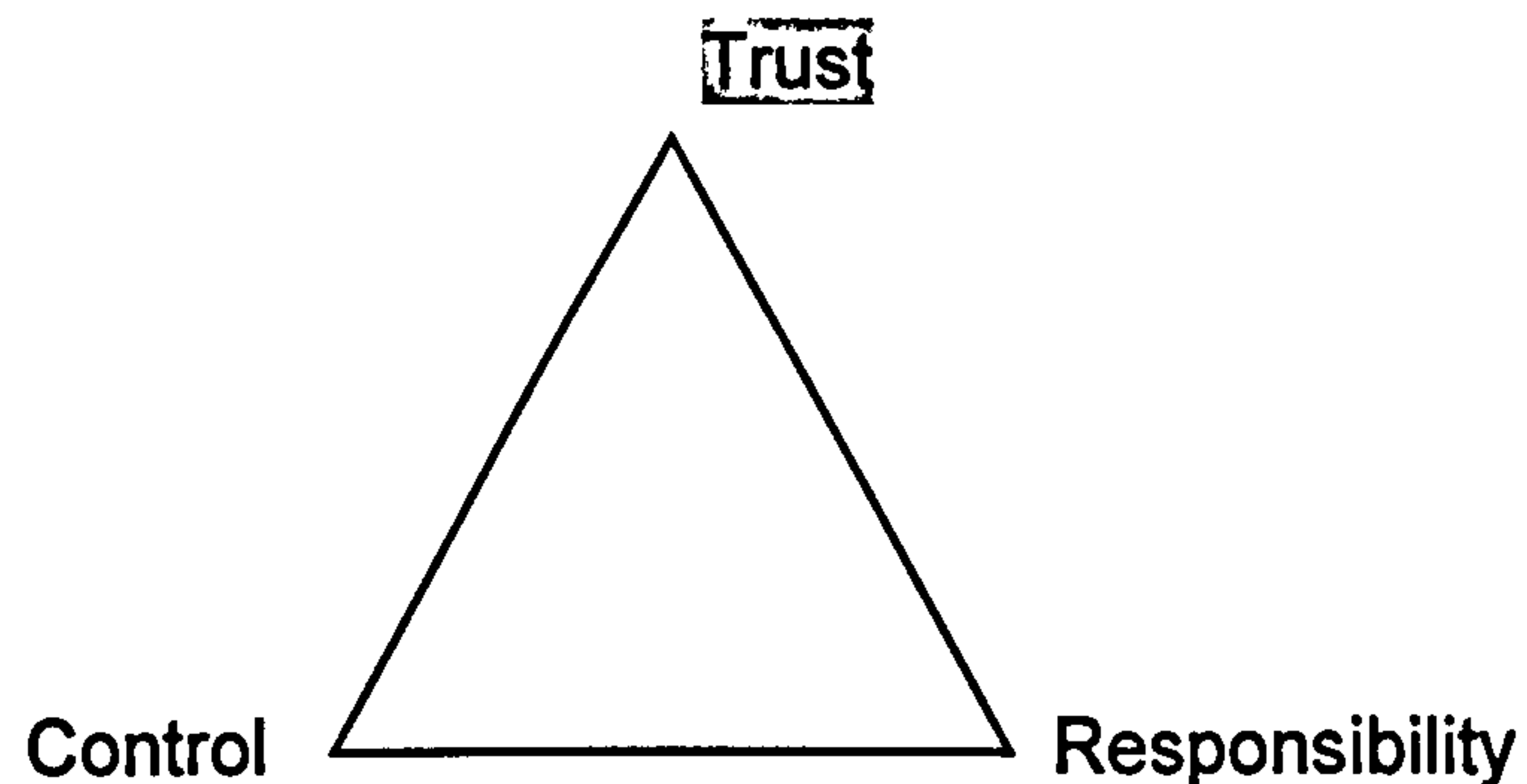
<b>User</b>	<b>Mid-user</b>	<b>Non-user</b>
<i>'and you might say 'Well I hear what they're saying about this, but I think they missed the point of it and I'm still going to use it, or ... maybe I will introduce it in a slightly different way, hoping that they will get the point of it next time.'</i>	<i>'I think I tend not to give myself a huge waiting time before I change it because generally what they're saying is what I think myself.'</i>	<i>'You can relax to a certain extent because you know that you don't need to change that any more, people may still not ... not react in the way that you'd like them to, but you can be pretty confident that that's more to do with them than it is to do with you.'</i>

## SYNTHESISING THE FOUR THEMES

Synthesising the four themes within the qualitative analysis suggests that three key concepts underlie this research, influencing the use consultants may make of reaction evaluation for the development of their training skills. These key concepts were TRUST, RESPONSIBILITY and CONTROL.



Each concept may be seen to interrelate to the others in a number of ways. This final part of the chapter explores each concept in turn.



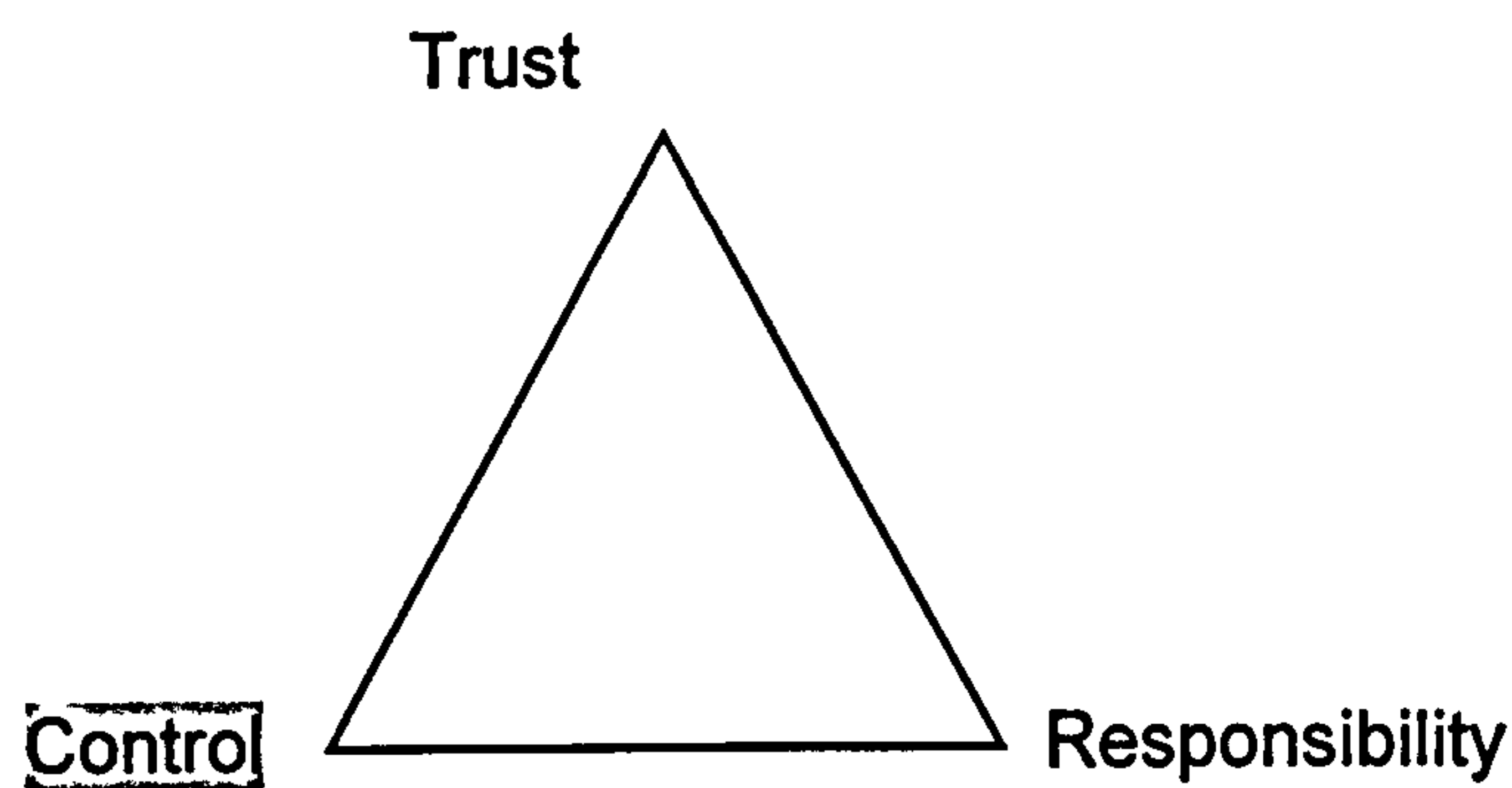
It appears that central to the feelings consultants have about the capacity of reaction evaluation to support their development lies the question of how far the information generated by this form of feedback can be trusted. All classes of consultant (users and non-users) express insecurities about the reliability of the reaction evaluation feedback. These insecurities relate to conflicts that are felt between the function of reaction evaluation for consultants, participants, and the training organisation.

Consultants do not view participants as a homogeneous group. They recognise that the needs of participants will be varied, but because of this view reaction evaluation as incapable of presenting a consensus of the training. The consultants accept that reaction evaluation is centred on the response of the participant, although suggest that the



picture it builds of training is a mixed one, as each participant will have had a different background leading to the training, and a different experience of the same training event. This focus on the participant does not offer the consultant the security that any of the judgements related to the training demonstrate THE 'truth'. What consultants appear to accept is that this picture will demonstrate a whole collection of individual participant 'truths', some of which may have similar characteristics. There is a difficulty for consultants here. Which truth should be believed? Which truth would be best to act on?

The relationship between consultants and reaction evaluation is also influenced by their view that the organisation takes in the building of a 'true' picture of training through this form of feedback. The lack of criteria against which rating-scale grades are assigned is highlighted as exacerbating the insecurity of the truth of the training. Not having clear criteria set by the organisation to support participants' grading is seen by consultants to result in unreliable feedback. Leading from this is the concern that only the rating-scale grade section of the reaction evaluation is analysed by the organisation, which does not enable any recognition to be made of instances where the grades and the comments from the open-ended question responses of the same participant differ. And a final key concern is the fact that the 'overall' grade for each course combines grades relating to different elements of the training, some of which don't relate to the delivery of the training event. Each of these influences the consultants' view that the feedback generated lacks reliability of application to their own development.

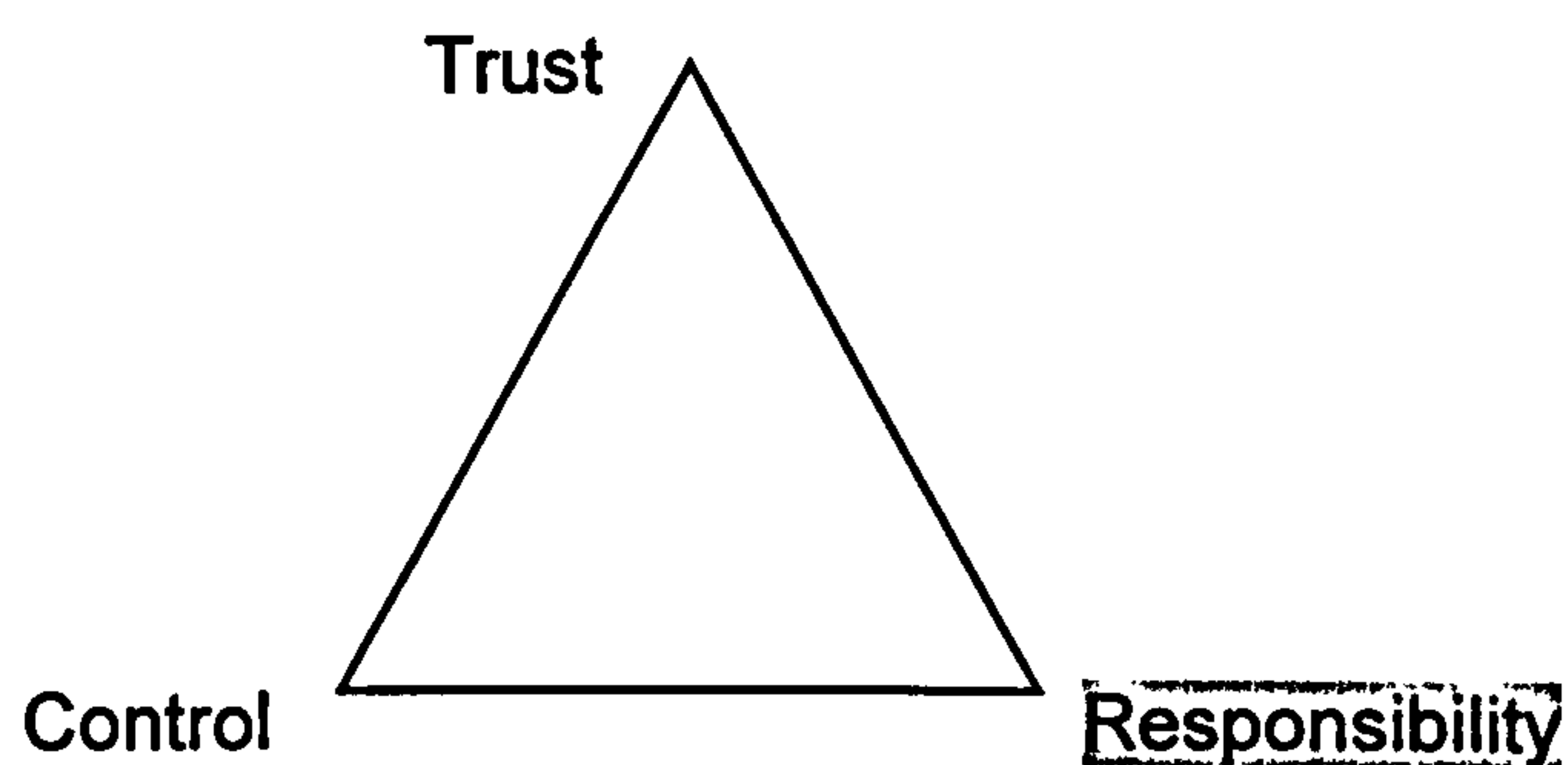


The consultants appear to demonstrate through their interview responses their feeling that the control of the feedback largely rests with the participant and the organisation. Participants are considered to have complete control over the rating-scale grades and comments that they make about training, and as such consultants express the concern that this expression of 'power' by some participants is not a justifiable basis on which the consultant could use the feedback for their own professional development.

Consultants do accept that some aspects of the training experience are within their control, but also pinpoint a range of variables that lay outside it. Some of these variables relate to participants, for example, participant past experience, the extent to which participants understand the aims and objectives of the training, and the motivation leading participants to attend the training session. Other variables outside the consultants' control may relate to the environment in which they are training, for example, the food provided, the drafty window, and the distance participants have had to travel. The '*non-use*' consultants in particular do not trust that the aspects lying outside their control do not have an impact on the subsequent participant evaluation, and believe that participant reaction to these aspects can also colour their evaluation of the training aspects more within the consultants' control.



Consultants' responses suggest that the way reaction evaluation is constructed is for ease of data handling by the organisation, and do not see the evaluation as useful either for themselves, or for the participants. There is perhaps an argument that the organisational control of the evaluation, through the use of standard questions and the evaluation structure, supports organisational convenience, rather than creating a system of evaluation holding relevance to consultants and participants.



Reaction evaluation emphasises the view of training from the participants' perspective. It could be accepted that it does not have any other purpose other than to provide a record of participant view. Consultants suggest that whilst they understand that the response is 'initial' reaction, they do question the extent to which the participants accept responsibility for themselves within the learning process. The interview data suggests that consultants consider participants to be active learners to varying extents, and that participant reflection on their role in the training, or the way in which their needs may differ from the rest of the participants, does not consistently reflect their acceptance that they should be playing an active part in the training.

There is an underlying concern from consultants that the responsibility for training in the participants' eyes lies with the trainer, and consultants appear to struggle at times to balance this against their apparent lack of control for some elements of the training. They

themselves suggest that the capacity for the trainer to be totally responsible for all elements of the training is reduced by organisational and participant control factors.

However, consultants do demonstrate that they feel a responsibility for the training and seek to make changes. These are often in response to participant comment, but relate most often to the content and structure of the training rather than the delivery. It is also evident that consultants take a measured approach to the changes that they might make. There is the suggestion that even these, what might be considered quite personally unthreatening changes, are only made when the consultant feels that participant comment matched a professional decision they had themselves made as a formative assessment of the training. Underlying this could be the suggestion that any decision to make changes resulting from feedback rests with the consultants' use of formative feedback rather than formal summative feedback, and this suggestion would support my quantitative data analysis findings.

## CONCLUSION

Central to the reasons for both valuing and questioning the capacity of all forms of feedback to support consultant professional development are these issues of trust, control, responsibility and the need for feedback to support taking actions that will lead to immediate impact. In addition, through these reasons threads the importance consultants place on their professional judgement and knowledge for evaluating the quality and usefulness of feedback as a basis for making decisions. It is clear that this professional evaluation results in consultants expressing negatives, as well as positives, for feedback factors they use frequently, whilst reflecting also on the positive aspects of feedback they don't use frequently. My research reveals a more complex picture of use than perhaps I expected as an



answer to the main research question, and this issue is developed further through the discussion in Chapter 7 of how my research findings relate to the investigative and main research questions.

## **CHAPTER 7**

# **THE CAPACITY OF REACTION EVALUATION TO SUPPORT PNS CONSULTANTS' TRAINING SKILL DEVELOPMENT**



## INTRODUCTION

This final chapter begins by linking the research findings to each of the investigative questions in order to draw a conclusion that will illuminate my research question:

**Changing your trainers? Is reaction evaluation used by Primary National Strategy consultants to support development of their training skills?**

The overall aim of my research was to support the continued development of consultants' training skills, and the improvement of quality in PNS training, by establishing an understanding of how PNS consultants use reaction evaluation to inform changes they make to training content, structure and their own training behaviour. The investigative research questions:

*What feedback factors do consultants identify as supporting development of their training skills?*

*What part does reaction evaluation play as feedback to support training skills development, in relation to other feedback factors identified by consultants?*

*What reasons do consultants give for valuing the feedback factors they use most often?*

*What reasons do consultants give for querying the value of feedback factors they use less frequently or never use?*

were used to develop an understanding of the nature of changes made to PNS consultants' training skills as a result of feedback. The findings generated by the research are explored in relation to each of these questions, with particular reference to reaction evaluation, and alongside this there is a discussion of how my findings relate to previous research.

The chapter concludes with a discussion of the implications of my findings for both course evaluation and consultant CPD within the

Primary National Strategy context of Children's Services. I then seek to make connections between the working situations of PNS consultants, and of trainers providing CPD for adults within the wider training community, in order to explore the relevance of the findings for professional practice.

## **RETURNING TO THE INVESTIGATIVE QUESTIONS: USING CONCLUSIONS FROM THE QUANTITATIVE AND QUALITATIVE ANALYSIS.**

### ***WHAT FEEDBACK FACTORS DO CONSULTANTS IDENTIFY AS SUPPORTING DEVELOPMENT OF THEIR TRAINING SKILLS?***

Narciss (1999) states that 'feedback is regarded as a source of information necessary for verification, elaboration, concept development and metacognitive adaptation' (Narciss, 1999, p 3), and the consultants in my research identify a number of different types of feedback as relevant sources to support these processes in their work.

The commonality of the range of these feedback factors, amongst PNS consultants in a range of Local Authorities, is indicated by the fact that following the verification process only one other factor was added to the list created during the initial study (see Appendix 3). The subsequent sorting activity carried out during the main study, where consultants identified the factors they most frequently used, shows that each factor is considered necessary for frequent use by some, if not all, consultants in the sample. This would appear to offer some reinforcement for my suggestion that consultants identify the most relevant factors for providing feedback capable of stimulating and supporting their professional development. A finding that may have implications for the design and provision of effective CPD for consultants.



The identified factors reflect the importance of both formative and summative feedback for consultants in their training role, although there are differences between consultants in the extent to which these types of feedback are considered important. Formal feedback, self generated feedback and motivational factors are all identified as having a role to play in the development of training skills, but it is evident that the sub-divisions with the highest consultant response totals are those containing 'self generated', 'motivational' and 'own experience' feedback factors. This suggests a connection between consultants' motivation to learn and the emphasis on self-directed learning, which is highlighted in research into adult learning (Brockett & Hiemstra, 1991), and which again may have a bearing on consultant CPD provision.

A key feature of feedback identified as being of greatest use for the development of training skills is that it appears to be linked largely to the consultants' personal opinion. Consultants consider feedback as more important when they are either experiencing learning as a participant, or are delivering training to others; less significant are feedback factors focused on the opinions of people other than the consultant, and this includes peers as well as participants. This evidence could show that consultants hold a belief that they have a level of appropriate discourse related to training beyond that of participants (Layder, 1998), which acts to negate the comments and opinions of participants during training sessions. The possible relevance of this relationship between participant and consultant is explored further in consideration of the next investigative question, and the implications of how consultants' personal response might influence the development of consultant CPD, for example for the development of peer coaching as a means of supporting improvement, is reflected on later in this chapter.

***WHAT PART DOES REACTION EVALUATION PLAY AS  
FEEDBACK TO SUPPORT TRAINING SKILLS DEVELOPMENT, IN  
RELATION TO OTHER FEEDBACK FACTORS IDENTIFIED BY  
CONSULTANTS?***

As a form of feedback, consultants would seem to consider reaction evaluation valuable, evidenced firstly by the finding that all consultants identified it as a 'frequently used' form of feedback, and secondly by its high total response score compared to the scores for other feedback factors; placing it as the third most frequently used feedback factor. These findings appear to signify that reaction evaluation has an important role to play in supporting the development of training skills when compared to other feedback factors.

However, expressing the findings in this way presents a somewhat simplistic picture of the part reaction evaluation actually plays in supporting consultants' professional development. More complexity is exposed when the fact that individual consultants view the usefulness of reaction evaluation very differently to one another is considered, and also when the relationship between reaction evaluation, as the key feedback factor within the summative feedback sub-division, and the feedback factors in the other sub-divisions is examined.

Reaction evaluation as a single feedback factor was valued more highly by some consultants than others, but analysis did show that this group of consultants used feedback factors from each of the sub-divisions, including placing value on the 'formal' feedback factors to support the development of training skills.

Further analysis however showed the particular importance of the 'self generated', 'motivational' and 'own experience' feedback sub-divisions as indicated through the consultants' identification of feedback factors. This importance is reflected by the analysis of the



distribution of responses across the sub-divisions. Here reaction evaluation, whether categorised by the 'origin' of feedback, or by the 'time' focused sub divisions, is assigned fewer consultant responses. This seems further evidence to support the notion that there is a more secure relationship between consultants and the forms of feedback related to their own observations, and experiences, than there is between consultants and feedback stemming from the opinions of others.

*To what extent then does this comparison with other feedback factors, reflect past research into feedback and reaction evaluation?* Certainly, the emphasis placed by consultants on their own experience and formative feedback methods may reflect the suggestion that a weakness of reaction evaluation is the emphasis it places on the trainers' responsibility for the training (Dixon, 1987). In my sample group consultants may be responding to Dixon's notion that learning for participants on courses is passive, because reaction evaluation focuses participant response on the actions of the trainer and the activities of the course, rather than on the participant's own actions as part of the training experience. Consequently, participant comment in summative feedback, may be found less relevant for supporting consultants' professional development than their own formative feedback methods. If consultants feel that they have responsibility for the training then there is logic in them responding most to feedback that is self generated, and this conjecture can be further explored by considering the qualitative data analysis of the consultant interviews.

Dixon (1987) also presented an argument that, by collecting information on participant feelings following training, reaction evaluation raises the expectation amongst participants that training should be entertaining rather than instructive. This suggestion highlights the issue of subjectivity in participant response on reaction

evaluation, further emphasised by Strathern (2000), who states that all participant responses must be considered as neither neutral nor transparent (Strathern, 2000, p 3). It provides a further possible reason for stimulating consultants' reliance on formative and self generated feedback, and perhaps it is the undeniable fact that reaction evaluation is subjective that underpins the way consultants use reaction evaluation as feedback when compared to other factors.

The validity of reaction evaluation feedback is reflected in research that highlights how the value of feedback is defined by the 'implicit assumptions about what constitutes valid knowledge and the relationship of authority that exists around the communication of these assumptions' (Lea & Street, 2000, p 45). Consultants' motivation to act on feedback may be linked to their views on the validity of participant response in reaction evaluation. Concerns related to issues of validity may be a reason for consultants placing greater emphasis on formative feedback and on their own experience to support further training skill development. The consultants' views about validity may also be linked to the trainers' view of authority and power within the training relationship. Any sense that the consultant has the more authoritative role within the training may act to offset the impact of participant response.

Furthermore, the validity of the participant response might be compromised by the quality and nature of the response content (Ivanic *et al*, 2000), leading to a suggestion that the reason consultants in my sample use reaction evaluation less often is because participant responses on the forms lack either content helpful for the further development of training skills, or enough specific content, or both. Any lack of focused feedback may relate to participants experiencing problems in matching their comments to the discourse of the training, or to issues related to participant ownership of the feedback system. Ultimately, the way in which



consultants' respond to participant feedback may connect to the awareness the consultant has of this ownership issue.

It has been found that key to the benefits of student feedback systems on academic staff and their teaching was the ownership of the feedback system by the students (FDTL Project, 2003). When students felt that they were merely form filling, and their involvement in any decision-making following the evaluation was negligible, their response to being part of the evaluation process was less positive. For teachers participating in PNS training a view that they lack the potential to influence any future decisions made about training, may result in them being less focused on providing specific feedback on reaction evaluations. Whilst my research did not offer the potential to investigate ownership from the viewpoint of the participants and so could not unpick the extent to which the quality of reaction evaluation comment was related to participant perceptions about how these might influence decision making, it did offer some chances to investigate whether an issue of ownership could influence consultants, and to what degree they felt reaction evaluation presented an opportunity for an evaluative partnership to exist between participant and consultant, leading to further development of training courses.

My work in relating how reaction evaluation plays a part in the development of training skills compared to other feedback factors, further demonstrates that consultants are less focused on using reaction evaluation than they are formative, self generated feedback factors. This may further reflect that, for adults, there is an emphasis on self-directed learning, with learning resulting from their active involvement in the learning process (Brockett & Hiemstra, 1991). This relative importance of self generated feedback factors may also reflect the consultants' view that the trainer – participant relationship is of less consequence than the principles of 'practical knowledge

and wisdom' (Schwandt, 2000, p 15) garnered by them in their own role, a view which results in these taking precedence over other methods of feedback when consultants make judgements about the enhancement of their professional practice.

It must be remembered that these findings need contextualisation from the direct experience of consultants to establish any real links between the behaviour of this sample group and evidence from past research. The discussion of the values and reasons expressed by consultants during my qualitative research through semi-structured interviews gives this context and is discussed in the following section of the chapter.

***WHAT REASONS DO CONSULTANTS GIVE FOR VALUING THE FEEDBACK FACTORS THEY USE MOST OFTEN?***

***WHAT REASONS DO CONSULTANTS GIVE FOR QUERYING THE VALUE OF FEEDBACK FACTORS THEY USE LESS FREQUENTLY?***

In their interviews, consultants consistently express a shared view that central to feedback having value is the capacity of that feedback to link to changed outcome in training or trainer behaviour, and 'users' of reaction evaluation consider that it is a method providing important information to support them for this purpose. Consultants assert that the feedback they value most offers them the potential to take action, sometimes immediate, as a result of the feedback, thereby demonstrating a link with the cyclical models of feedback and learning (Bangert-Drowns, et al, 1991; Butler & Winne, 1995; Kolb, 1996).

This potential to see the impact of a change appears to be a significant influence on the way this group of consultants categorise feedback as valuable, but although reaction evaluation does hold



some value here, identified as of higher value are 'observation of participant response' and 'observation of other trainers'. The reason expressed by consultants for the use of feedback from these sources is that they enable them to see a response from participants immediately a change is made. The immediacy of impact valued here appears to offer reinforcement of the consultants' judgement, based on their practical knowledge and wisdom, to make a decision to change the training (Schwandt, 2000).

However, underlying this apparently simple connection between feedback and changed outcome, there is evidence, within the responses from the interviews, of the more complex aspects of feedback as a form of communication (Curry, 1991). Consultants who place great value on observing participant response, also recognise that audience response during training is not always an indication of the truth of the training experience. They recognise that positive audience response might reflect passivity rather than interest, and are clear that raising the level of audience discomfort in order to increase the potential for active learning might be necessary. It is also evident that observing other trainers might be valued highly, but that the opinion of the observer is a significant influence on any future use of this form of feedback. Consultants were clear that no one trainer could emulate another. They recognised that they may pick up ideas and techniques, but also accepted that, because training demands each consultant to exhibit a training persona, techniques were not necessarily transferable and might not work in the same way.

This shows that their own professional judgement is applied even to their most commonly valued feedback factors, and that a process of mediation and evaluation is conducted to judge the usefulness of the feedback information received. Consultants do indeed show that they require codified, cultural and personal knowledge before making decisions (Eraut, 2000). Their decisions are informed by personal

experience and consideration of the value of the information received and the trustworthiness of its source, and users of reaction evaluation demonstrate in their interviews that whilst they consider participant comments of value, they are not blind to the problematic nature of the validity and reliability of the comments.

It is apparent from interviews that one of the reasons for making changes stimulated by feedback links to the consultants' own experience as participants on courses. This is reflected in the way they make decisions about which feedback to use, basing their decisions on whether they would agree with the participants or not, although the extent to which empathy with participants acts as an influence varies between users of feedback.

Whilst empathy may have some influence it is apparent that even with the most empathetic users of feedback the responsibility for decision making is considered to be solely theirs. Consultants were clear that it was they who had the experience of professional practice to make decisions, and paramount was the commitment to using their professional judgement to make the response they felt was most appropriate. The interviews demonstrated that whatever reasons were given for the use of feedback, the actual content of feedback from all sources was mediated by the user's professional knowledge and judgement. This professional view consultants have of themselves, and the emphasis they place on professional judgement related to their decision making, is also reflected in the reasons consultants give for not valuing some types of feedback. The central tenet for not valuing feedback is the concern for how far the feedback can be trusted to provide an accurate enough picture of the training, and how far it can act in supporting the consultants' professional judgement. Even within the discussion above of the reasons consultants express for using a variety of types of feedback it is clear that no form of feedback is taken on face value and without



mediation. It would appear that consultants consistently evaluate the extent to which they can trust any feedback, whether positive or negative, before making decisions to adapt training methods or content.

These findings serve to highlight that underpinning their comments about the validity of feedback are the perceptions consultants have of teachers as participants, and of the relationship between consultant and participant. Whilst issues of differentials of power were discussed in the interviews, this discussion did not reveal that consultants openly express a superiority over the participants, indeed all recognised that their own background as teachers was a significant influence on the way they conducted training. However, a differential was communicated through the view that they had stepped over a line from 'teaching' to 'training' in some way, that the discourse of course content and structure was less understood by participants than the consultant, and that this lack of understanding could influence the validity of participant response. It appears that, although consultants draw on their own experiences from the times that they were teachers experiencing training, this act of 'moving to the other side' has a subtle, but significant, influence on their views of teachers as participants and their own responsibility as consultants.

There was a mismatch between consultant expectation and participant expectation, and perhaps a feeling that the methods of training currently employed, e.g. workshops, were actually in advance of the expectations teachers held of what form training should take. Consequently, if teachers felt at odds with the training method itself then evaluating that training might also present difficulties, and both mid-users and non-users of reaction evaluation indicated that they did feel that the validity of participant comments was influenced by the lack of understanding they perceived

participants to have about what constituted valuable evaluation feedback. The consultants' overall view that many reaction evaluation responses lack validity appears strengthened by their perception that participants lack in understanding related to the purpose and function of evaluative response. They outline two reasons for why the request for a reflective response presents a difficulty for participants:

- The timing of the reaction evaluation at the end of the course;
- The fact that completing an evaluation is an additional conceptual objective to reach – something which the consultants themselves admitted to finding demanding.

It might seem that consultants consider the lack of validity in reaction evaluation to largely relate to participants, and their lack of understanding or attitudes to training, but this is not always the case. Many consultant comments attribute their frustrations to aspects of the structure and design of the reaction evaluation itself, and begin to explore how the organisation, in promoting this as the main evaluation method, should accept that there are issues of validity, particularly with a rating-scale grading process that is not criteria referenced. This was a reason identified by both users and non-users of reaction evaluation, and largely focused on their belief that the rating-scale grading does not support either the participants, the consultants or ultimately the organisation to be able to judge whether the training experience had been good or not. Added to this view, consultants expressed their concerns over the control they had for improvement in training being compromised by the inclusion on the reaction evaluation of rating-scale grades related to the venue and the intentions of participants to use the training in their future work. Consultants accepted their responsibility to improve training but the inclusion of aspects beyond their control, which had the capacity to



influence the final grade on which the training, and by implication the consultant, was measured, was considered by all consultants as a key issue contributing to their reasoning for not using reaction evaluation more frequently.

## **PAINTING A PICTURE OF REACTION EVALUATION USE BY PNS CONSULTANTS**

These research findings present evidence that reaction evaluation is used by this sample group of PNS consultants to support the development of the training they provide. Semi-structured interview data highlights that participant feedback, presented through the reaction evaluation, is read and generates response in all consultants. Specifically, it shows that adjustments to the content and structure of training are the main aspects of change stimulated by reaction evaluation. This indicates that reaction evaluation has a role to play in the development of training, but the research also reveals a complexity related to its use that may have implications for both the evaluation of training and the provision of consultant professional development. This complexity centres around the way consultants mediate feedback information received from reaction evaluation.

Firstly, the extent to which consultants use reaction evaluation in relation to other feedback factors is mediated by the concerns they express associated with issues of the validity and reliability of the feedback contained within it. The three key themes of trust, control and responsibility were areas of concern shared by all consultants, including those much more predisposed to using reaction evaluation as feedback than others. It is a feature of this group that the feedback most valued for reliability is that which is formative, self generated and linked to their own experience. And these feedback

factors generate change not only in the structure and content of training, but also in training behaviour.

Consultants do not mention any instances where change to training behaviour was stimulated by reaction evaluation, and this fact may indicate an underlying consequence of the issues of trust consultants felt about the feedback. Change to the content and structure of training in response to participant feedback and the reaction evaluation questions focused on administrative aspects, such as venue quality, is not change that impacts on the consultant's own persona. It could be argued that this is a relatively comfortable level of change to make, and can be made more immediately following feedback, further reflecting the apparent emphasis consultants place on feedback that can lead to immediate change and changed outcomes. Changing deeper seated aspects of behaviour may be more uncomfortable, and may need to be prompted by more self generated feedback following a longer period of time for reflection. Participant comment may feed into this reflection period, but it does not appear to be a main driver of behavioural change.

Secondly, the research findings suggest that the consultants' decisions about whether to make changes or not are mediated by the consultants' professional knowledge and understanding. This mediation occurs with all forms of feedback, but with reaction evaluation appears linked to the dilemma consultants encounter, knowing that participant responses are the product of all the individual 'truths' of the training as experienced by each of the participants. The evidence demonstrating the extent of the consultants' use of their professional knowledge and understanding is threaded throughout the research, and it is clear that all potential change is evaluated fully in the light of this knowledge. It is professional knowledge, and also consultant confidence, in their own role and abilities that form the basis of whether change will be made



following feedback or not, and this is upheld by the notion they hold that participants lack both in the expertise to understand course objectives and to evaluate training beneficially.

Overall, this research suggests that consultants feel the disadvantages of reaction evaluation reduce its capacity to be supportive in informing their own professional development, although demonstrate that it holds a more secure role for assisting immediate change to course structure and content. In the sample three consultants used it less frequently due to the issues of validity. Interestingly, the fourth consultant, who at the first research stage indicated one of the highest response rates for the sample, reflected, when subsequently interviewed, that as the first part of the research was conducted at a time when they were new to the job they felt their reliance on reaction evaluation at that stage had been an indication of their lack of confidence in their new role. In interview this consultant explained that as time had elapsed the disadvantages of reaction evaluation were more evident, and experience had generated more confidence in their professional judgement.

What consultants appear to value from feedback is a support to complement their professional confidence and competence. Consultants explained how they were influenced by both negative and positive feedback, and the resultant changes in training demonstrated their reflection as practitioners. The most positively valued feedback was formative, consultant-initiated feedback, exhibiting a clear link with professional competence. The least positively valued feedback was summative, and considered to have issues of validity, as a result of its generation from participant opinion, or administrative emphasis. It is evident that these findings have implications for the development of course evaluation and for the consultants' professional development. Both are discussed next, in the context of PNS consultants and the wider context of training

organisations. This discussion considers the implications of my research within the training environment that currently exists for practising teachers, and it develops the potential for further research into this area of study.

## **IMPLICATIONS OF THE RESEARCH FOR TRAINING ENVIRONMENTS**

I set out in this research to consider how, for a Children's Services department employing PNS consultants, the notion of 'Changing your trainers' in response to the consultants' use of reaction evaluation might have implications for the development of their training skills. My aim here is to outline and discuss the possible implications of my research for both course evaluation and consultant CPD. I attempt to thread evaluation of the research I have completed, and suggestions for further research throughout this discussion.

It is clear from the findings that the concerns and responses of PNS consultants, as they comment on their training role, in some ways resonate with those of trainers studied in other contexts, documented within the Literature Review. This section offers the opportunity for me to address implications of my research within the specific environment and circumstances of the PNS consultants, but also to broaden my consideration into the wider training context.

### ***IMPLICATIONS FOR THE DEVELOPMENT OF COURSE EVALUATION***

The findings offer implications for the development of course evaluation in a number of ways. Whilst assisting the view that reaction evaluation can provide support for consultants on some levels, for example, adaptation of course content, they also reveal the complexity of the relationship between PNS consultants and this



form of evaluation, and it is likely that the same complexity will be reflected by trainers working in training contexts beyond that of the Primary National Strategy.

### *The Issue of Subjectivity*

The research findings suggest that the issue of subjectivity of participant response influences the extent to which consultants respond to participant comment. In the situation where participant opinions are strongly mediated by the professional knowledge and judgement of the consultant, there is some evidence consultants respond to:

- the comments that they feel most professionally aligned to,
- the comments that, on reflection, they agreed with,
- the comments that reinforced changes that they themselves had already decided would improve the training.

The extent to which consultants apply their professional knowledge and understanding to making changes to their courses, or developing their own training behaviour, significantly impacts on the potential for reaction evaluation to be a key driver of training improvement.

Consultants neither work on the 'customer is always right' principle, nor reject participant comment out of hand, but issues of subjectivity and validity of participant comment are central to the views expressed by consultants. Perhaps this is the nub for development of an evaluation process of value to both trainers and participants. This research demonstrates clearly that PNS consultants see the open-ended question comments on the reaction evaluation as being more informative for future course development than the rating-scale grading system that is read by an optical mark reader (OMR). The criticisms levelled at rating-scale grades relate generally to the fact that 'what grades mean' is not qualified by criteria, therefore not

understood by either consultants or participants, and is open to variation due to a lack of shared understanding.

Perhaps one implication of this for course evaluation using reaction evaluation might be to consider the roles of open-ended question comments and rating-scale grades. Increasing the focus in reaction evaluation on the use of open-ended question comments as the main means by which participants respond might act to support trainers more productively. Equally, constructing clear criteria for rating-scale grades would perhaps go some way to supporting the validity of the grading process, and, whilst this might take time to construct, basing grading on a shared understanding could support a reliability that the grades received reflected a less subjective view of the training experience.

Taking an approach to evaluation where the emphasis on open-ended question comments is increased would clearly have a knock on effect into the administrative analysis of the reaction evaluations by the training organisation. Constructing an evaluative view of training from participant comment would be more complex than the creation of average grades for categories using the OMR. However, a compromise could be developed. Rating-scale grades, now supported by criteria for participants, could be included for some utility aspects of the training, and would remain the main form for administrative analysis by OMR, but the evaluation process could also include the synthesising of participant open-ended question comments of more affective aspects. The synthesis could become the responsibility of the trainer(s) involved in the course, and could then be reported to line managers, an action that may act to shift the emphasis and function of reaction evaluation from the training organisation to the trainers themselves.



Not just in the PNS context, but in the wider training context too, the use of reaction evaluation has largely been seen as an organisational tool to take some measure of participant response to training, and has been used by some to extrapolate information to quality control trainers' work. Research, particularly Dixon (1989), warns of the problems of this organisational use, and multi-dimensional models differentiating the affective and utility aspects of reaction have been developed (Alliger *et al*, 1997). The suggestions I have made for the division of reaction evaluation into administrative and training related aspects, with a shift in emphasis for analysis towards the trainers themselves, in no way move as far as the multi-dimensional models, but may act to respond to the issues of relevance and control expressed by both the PNS consultants in my sample, and those studied in wider research.

For PNS consultants in particular it would act to offer the opportunity to increase their involvement in the training cycle, which currently can be limited by the structure of PNS training and the context in which it is delivered. Aspects of the training cycle, which focuses on the trainer being involved in a cycle of activity linked to planning, delivery, evaluation and improvement of training events, are sometimes difficult for PNS consultants to become fully engaged with. One example, is where for PNS consultants the circle is broken when there is no need for repetition of training, and so any evaluation made will not be specifically focused on the necessity to use the evaluation findings in order to drive future course development. This break perhaps overemphasises the organisational and administrative function of the reaction evaluation, rather than supporting the potential to inform change for the consultant. This aspect is emphasised by the fact that PNS consultants, unlike trainers in some other contexts, have no responsibility for constructing evaluation programmes for each training event, but are evaluated on standardised forms. Whilst PNS consultants might still be denied

involvement in planning evaluation programmes for courses within a training cycle, a requirement to synthesise and engage with reaction evaluation on a more constructive level might enable the consultant to take more from each training experience in order to support their professional development.

### *The Issue of Standardisation*

The issue of the standardisation of forms, resulting in all training courses, however much they may differ from one another in purpose and structure, being evaluated on a reaction evaluation of the same design, is also one of concern for consultants.

It reflects further the alienation from the process of course evaluation felt by consultants, and it is linked to the concerns consultants express about the validity of rating-scale grades. When relating grades to their own professional performance, PNS consultants comment on the lack of control they have for the grading of particular aspects included within the standard reaction evaluation design; for example, the grading of the venue, the grading of the materials provided (if these are supplied by DfES), and the grading of the extent to which participants might use the training in their work. As these form part of the overall grading for the day, they are cited as a reason for querying the organisation's use of the overall grade to provide evidence about a consultant's abilities.

In the wider training and adult learning context relevance and control are considered important features contributing to the use of feedback for learning and development. An implication of the trainer response to the standardising of forms for course evaluation might be consideration of how reaction evaluation could respond to the diversity of courses and offer the potential for feedback to both trainers and the organisation. Administrative aspects of the training, for example, the quality of venue, could form a standardised section



of the form, with customisation to give an individualised 'best fit' evaluation for the aims and content of each course. Issues related to the workload involved in both the creation and the analysis of this type of evaluation would need to be considered, but the work required could be outweighed by the potential benefits of the system for both trainers and participants. More specific feedback may enable more informed course development, and feedback of evaluation to participants following the training, if it was of a specific nature, might support the increased impact of training in the workplace.

### *The Issue of Participant Reflection*

A requirement for more specific feedback is linked to the comments consultants made that reaction evaluation lacks information specific enough to be considered of value in supporting further course or consultant development.

One facet of this is the timing of reaction evaluation, with consultants suggesting that completing evaluations at the end of course presents difficulties for the generation of useful feedback information. They suggest that many participants complete only the rating-scale grades, rather than grades and open-ended question comments, on reaction evaluation because they are keen to leave, and that by completing only the grades the participants do not provide a full enough picture of the training to support consultant / training development.

To refocus the procedure related to the completion of reaction evaluation, perhaps by creating a structure where sessions of the training were evaluated at points throughout the day, building to an overall grade for the day evaluated on the completion of the course, might alter the environment of evaluation in a number of ways. Firstly, structuring the course to provide integral time for evaluation would give participants allocated time to reflect on the course as it

was in progress. This may support a clearer evaluation of course content as the time lag between activity and evaluation would be reduced. Secondly, evaluating during the course might also remove the feeling that participants were being asked to evaluate in 'their own time', i.e. when the course had officially ended, and may lead to more completion of open-ended question comment as well as rating-scale grades if participants did not feel pressured to leave. Thirdly, a more structured evaluation may support the generation of more specific comments, and in turn support the ability of the trainer to use the information.

It is also possible that this would perhaps touch on a more deep-seated issue expressed about training by both PNS consultants and in wider research, as structuring the evaluations in this way might be instrumental in altering the relationship between participant and training. If participants were required to be more consistently engaged in evaluation in a more focused way this may increase their levels of activity in the learning process, and go some way to counteracting the notion of passivity of participants with training.

Developing different approaches to evaluation might offer opportunities for further research focused on studying the way trainers use differently structured evaluations. Criteria for rating-scale grades could be developed and the use trainers make of the feedback from evaluations supported by grade criteria could be compared to the way in which they use reaction evaluations without criteria. Alternatively, the design of multi-dimensional evaluation could be studied in the PNS context, with evaluation divided between consultant and administrative aspects, and the use of these compared to the use of standardised reaction evaluation.

There is also potential for research into the design and use of course specific evaluation, and for the development of course structures that



focus evaluation as an ongoing activity throughout the course. Guskey (1999) comments that whilst evaluation can't be completely objective, the process should not be based on opinion or conjecture. 'Evaluation needs to result in the acquisition of specific, relevant and valid evidence' (Guskey, 1999, p 4), and whilst there are examples of course specific evaluation being used in a range of contexts, this has not been an area of focus for PNS training, and in the wider training community the effect on the trainers' response to specific course evaluation has not been studied.

Studies that focused on investigation of this kind of evaluation change could be developed to either concentrate on the way trainers respond to the feedback received, when compared with standardised reaction evaluation, or could be developed to support more understanding of the extent to which evaluation structure and procedures have an impact on the active engagement of participants in the training process.

### *The Issue of Appropriate Discourse*

An additional issue identified by PNS consultants was the extent to which they felt that participants were sufficiently skilled in the discourse of evaluation to make comments specific enough to be of use to consultants for future course development.

Providing criteria for the grading on reaction evaluation might provide a support for participants in this area, but a development of research into how supporting participants in the general skills of evaluation acts to impact on the nature of evaluation and the way in which it is used could be a further focus to support the development of effective evaluation.

Before moving on from the implications of the findings for reaction evaluation, recognition must be made of the significance of the lack

of evidence from the participant viewpoint within my research. It is apparent that my research findings are entirely focused on the trainers' perceptions, and this fact does delimit the discussion of implications when referring to both consultants and participants. Any comment related to the behaviour of participants has to be understood as a product of the expression of an opinion from a consultant, and in an evaluation of my research, whilst I feel confident that the findings go some way to revealing the underlying reasons for consultants' use of reaction evaluation I must admit to the charge that the research is only from one perspective. For changes to be made to evaluation, it is clear that the participant view of reaction evaluation should form the basis of further research, by providing triangulation to support the validity of the findings, and secure an informed view of how changes might be made.

It has to be acknowledged that acquiring a deeper understanding of participant actions and opinions might exert an influence on the way in which the findings from the viewpoint of consultants might be used. A central finding related to consultants questioning the value of using reaction evaluation is their opinion that the participant subjectivity of the comments, and possible lack of participant understanding of the discourse of the training lead to the evaluations providing little support for them as they seek to improve their training. In holding the view that they should use their professional judgement to mediate the participant responses, consultants did not seek to explore the alternative that the participant comments might actually be correct! It may be the case that the quality of the participant responses, perhaps lacking in clarity and without clear exemplification of evidence to back up opinion, prompts the consultant to consider the responses of little use. However, this lack of clarity may be born from a belief on the part of the participants that the comments they make in response to PNS training have a very limited potential to influence future decision making within CPD. They



may therefore hold the view that expending energy on developing detailed answers to no effect is a fruitless task, a view that results in them responding only to the rating-scale grades, or commenting with unhelpful brevity.

Comparison of trainer perceptions of why participants evaluate as they do, followed up with participant study to test how far these perceptions are accurate might be a first step in furthering understanding of this area. Do participants feel that they have influence in the evaluation process? How active do they consider themselves to be in the training process? How skilled do they feel in the process and discourse of evaluation? Investigating questions such as these may begin to illuminate the trainers' perceptions by developing an understanding of the reasons for participant behaviour. For example, do participants complete the rating-scale grades more often than the open-ended question comments due to lack of time, as suggested by the consultants, or are there other reasons for this that could be explored from the participant's perspective?

Also worthy of comparison might be a study of the extent to which the participant response to training may be influenced by the cultural aspects of the training context. Within the PNS context, a suggestion could be made that the lack of participant response to training reflects a deep-seated reaction to the feeling teachers have that the PNS is a force outside their influence. A feeling that no comment on their part will serve to affect the agenda within the PNS, and how that agenda is reflected through the training, may be a reason for lack of response. In other training contexts, where participants feel that there is the potential to affect the future training direction and content, the patterns of response on reaction evaluation might be much more developed, and offer a picture of active involvement from participants. Exploring this cultural dimension could go some way to

building an understanding of how teachers respond as evaluators, through the development of a study to compare teacher responses and attitudes within PNS and other training contexts; perhaps broadening this to compare the responses of teachers and other professionals in different training contexts.

### *The Importance of Differing Consultant Response*

Finally, the findings in my research that indicated that not all consultants respond to the same type of feedback opens the wider discussion of whether methods other than reaction evaluation should be employed to support course evaluation. If further research confirmed the results of my very small scale sample, and indicated that consultants do respond best to the professional opinions of one another, this may reinforce that an increased focus on observation of training and managed peer review would support consultants' professional development. It might also influence the organisational use of course evaluation by promoting the opportunity for consultants to add their view of the training to the evaluation, basing this on self generated and formative feedback factors. This more inclusive view of evaluation links into the implications of my research for consultants' CPD.

### *IMPLICATIONS FOR THE DEVELOPMENT OF CONSULTANTS' CPD*

The way in which PNS consultants respond to feedback has implications for their continued professional development, some of which may be also seen to apply to the wider training community. This section of the chapter discusses these implications both in the specific PNS and wider contexts.

### *Developing CPD in response to feedback*

Moving to increase the use of observation, peer review and coaching as methods of feedback built into a CPD programme for consultants,



might offer support for the development of training skills, including the development of training behaviour.

Observation appears to be of particular significance as a feedback factor for the PNS consultants. Whilst caveats should be made about the dangers of subjectivity in making observation judgements about what makes good or bad training, within a structured programme of development, designed to include different sources of feedback to improve validity, observation would offer a method of feedback that actively engages the consultant in the process of improvement. Consultants might plan together and observe one another delivering particular aspects of training. Having understood the objectives of the activity and the impact it was designed to have, the resulting observation would have potential to be more focused and evaluative.

To focus on developing training technique and improvement in a formalised way would, in the context of PNS consultants, be to begin to move into an aspect of professional development previously little used. There have been some pilot studies amongst groups of PNS consultants, stimulated by Primary National Strategy regional directors, as part of a wider focus on improving consultancy amongst this group. Some of these involved peer coaching, but not specifically in the arena of training. To begin to support the development of training behaviour and skills would begin to develop the use of consultants' professional knowledge and understanding in a much more defined way, and would offer opportunities for further research into the CPD of this group. It might offer the potential to develop action research studies focused on groups of PNS consultants working to improve their training skills by using peer coaching methods. The impact on how their training had developed, measured by observation of training techniques before and after the research period, and by gathering perceptions from the consultants on how their training had changed, would support an understanding of how

effective such a method of professional development might be, and this type of research could be applied, not just to PNS consultants, but to the professional development of trainers in any context.

### *The use of Professional Knowledge and Understanding*

My research shows that PNS consultants rely a great deal on professional knowledge and understanding when making changes, but it does not seek to investigate whether the result of the decisions made do indeed lead to improved training. This would be an interesting aspect to research, but it would also be of value to research further the way in which consultants apply their professional knowledge to feedback information.

Professional knowledge and understanding, whilst important, should not be used as an excuse to either maintain the status quo or to make only changes that are in agreement with the consultants' own opinions. The findings in this study should not preclude a suggestion that the participants might be right in the evaluation they make, and that what is evidenced through the interviews with consultants in this research about participant response is the issue that the 'truth hurts'. Research has shown that learning may not be comfortable, and this is as much the case for consultants as it is for participants (Anteil & Casper, 1986). There is a need to unpick the 'how' of consultant response to reaction evaluation comments.

How do consultants read evaluations? How do consultants respond when they read the evaluations? This would require research that attempted to study the consultant response to reaction evaluation from the time the evaluation was first read, documenting the articulated thoughts from the consultant about the participant feedback, and perhaps tracking this consultant response through a period of reflection for a time following the evaluation. This exploration would yield information about the processes used by



consultants when actually reacting to feedback, and would form a vehicle through which to study the issue of why training content and structure appear to be changed more readily by consultants, than training behaviour. Such an understanding may support the better use of reaction evaluation for professional development, and is an area of research that would have implications within the wider training community as well as amongst PNS consultants.

### *Teaching versus Training Skills*

PNS consultants demonstrate in this research that whilst reaction evaluation prompts changes in the content and structure of training, changes in training behaviour are stimulated by other feedback factors.

However, actual opportunities to change the content of training are sometimes lacking for PNS consultants as few courses are regularly repeated. This means that in practice consultants have more opportunities to develop training behaviours through feedback, because these behaviours are used in all training through application to different content, but PNS consultants do not indicate that changing behaviour is a focus for development following feedback.

What appears to happen is that consultants make a connection between their teaching skills and training, treating the course participants as they would have done a class, and developing an assurance that what was successful teaching behaviour can be replicated successfully in the training room. What also appears to happen is that the training organisation accepts that this is the situation, with a tacit acceptance that teachers can train adults, resulting in a lack of development for professional development of training skills and behaviours. An implication for the improvement in CPD within the PNS context might be the development of a focus on adult training, with an emphasis on understanding the difference in

the relationship between trainer and participants, particularly in the context of training of very short duration. Development of CPD in this way would serve to highlight the differences between teaching children and training adults, although investing the time needed might be questioned by training organisations because running training forms only part of the PNS consultant work profile.

The question of the extent to which PNS consultants apply their knowledge as teachers to situations where they are training adults is a very interesting one, and very pertinent to the findings of my research that suggest such a reliance on professional judgement on the part of consultants. What professional knowledge and skills are PNS consultants actually applying to their work? It could be argued that it is neither professional knowledge of adult learning, nor of training, but that it is based on a professional knowledge from a very different context that requires quite different skills. Further research into the extent to which skills are transferable from teaching into adult training, alongside an unpicking of the origins of the professional knowledge applied by PNS consultants, would be needed to support any assertion that using professional knowledge to inform training development is a valuable, and reliable base on which to build a programme of CPD.

My research context is likely to be replicated across many others where training has developed within organisations but no specific professional development for training adults has been offered to the trainers. To duplicate this research across a wider number of training organisations would help to inform best practice in the use of feedback to inform the professional development of trainers with a similar profile.



## CONCLUSION

Whilst much previous research has investigated the extent to which reaction evaluation can provide evidence of impact of learning, and has touched on the trainers' response to this, my research has placed the consultants more centrally in an investigation of the capacity for reaction evaluation to support consultants' training skill development. Although my study is confined to one particular training context, and is limited in size to a small number of consultants, there are many ways in which my findings could be extrapolated for the wider training context. Whilst I recognise that to replicate my study with a larger sample of trainers would serve to give reinforcement to the findings, the semi-structured interviews offer an opportunity to support findings with a specific depth of reasoning.

My findings suggest that reaction evaluation, in a standardised form, does not offer support to PNS consultants. It offers immediate feedback, but that feedback cannot be acted on immediately, namely, later in the same course, and therefore the evaluation made is open to mediation by the professional knowledge and opinion of the consultant during the time of reflection that follows. In addition, issues of validity of the feedback mean that it is not treated as valuable.

The feedback factors consultants appear to value most; the self generated and formative ones, also appear open to a similar mediation through professional knowledge, and have issues of validity as effective methods of feedback. At this stage, whilst my research may suggest that these have greater potential to be supportive for consultants, the way professional practice could be developed would need further research. My research has highlighted that all types of frequently used feedback identified by consultants

have disadvantages, but this shouldn't be taken to indicate that feedback does not have the capacity to be used for professional development, rather that more research into how it can be used is needed.

In my research context PNS consultants are left to interpret feedback against their own experiences and reflections, and do not have training to train, as happens in some other contexts. The central premise that PNS consultants have an in-built ability to train adults because they were teachers is not necessarily true, for adult learning is very different to children's learning. Perhaps it is this aspect of professional practice that should be first addressed by the organisations employing consultants, through encouraging an increased commitment for developing training skills, informed by further research into effective ways to use feedback and consideration of how this understanding could inform professional development.

I set out on this research journey in order to investigate the capacity for reaction evaluation to support a balance of professional development and organisational change. I was interested in how the balance could be struck between the drive for a measure of organisational accountability through feedback, and a level of clear, relevant feedback for trainers. What is apparent is that consultants desire feedback and as reflective practitioners do use this to improve their training, but the extent to which reaction evaluation is used is limited by concerns about the validity and reliability of the feedback received. The picture presented in this research of consultants' response to feedback is that, whilst certain aspects of training may be influenced by reaction evaluation, to a large extent self generated feedback will be considered the most reliable. Those responsible for supporting consultants' professional development need to assess how standardised systems of evaluation, such as reaction



evaluation, inform supportively, and how the formative feedback generated by their training professionals might be used to inform on the quality of training, as well as to provide a basis for trainer CPD programmes. There is an inherent danger in the over reliance on summative evaluation methods, which provide evidence at too late a stage to support the development of successful professional development.

It would appear that, at this time of change within continued professional development for serving teachers, where coaching, learning networks and blended learning are set to form a significant part of the CPD scene, persisting in the use of reaction evaluation alone may not be the most judicious decision training organisations can make about evaluation. To respond to these changes and to the needs of the training professionals, evaluation needs to itself become an integral part of the professional development process, and should be planned before the outset of training, alongside the course structure and content.

Organisations seeking to make effective training provision for teachers, and to demonstrate accountability and continued improvement in training require training personnel who are capable of delivering such improvements through the continued development of their training skills. It is evident that those with responsibility for demonstrating accountability must consider the nature of all feedback systems active within the training situation in order to provide feedback of the most suitable kind to support trainers in this changing context. A partnership approach to the evaluation of teachers' CPD, reflecting the professionalism of all those involved; trainers, participants and managers, may be what is needed before evaluation can more reliably support trainers towards improvement.





## REFERENCES

Anderson, R. C., Kulhavy, R. W., & Andre, T. (1971) *Feedback procedures in programmed instruction*. Journal of Educational Psychology, 62, 148 - 156.

Anderson, R. C., Kulhavy, R. W., & Andre, T. (1972) *Conditions under which feedback facilitates learning from programmed lessons*. Journal of Educational Psychology, 63, 186 - 188.

Antheil, J.H., and Casper, G. (1986) *Comprehensive evaluation model: A tool for the evaluation of non-traditional educational programs*. Innovative Higher Education, 11 (1), 55 – 64.

Argyris, C. (2000) *Flawed Advice and the Management Trap*. New York, Oxford University Press.

Aronson, E., and Carlsmith, J.M. (1969) *Experimentation in social psychology*. In G. Lindzey and E. Aronsen (eds) *The Handbook of Social Psychology*, Vol. 2. Reading, M.A: Addison-Wesley, 1 - 79.

Bangert-Drowns, R. L., Kulik, C. C., Kulik, J. A., and Morgan, M. (1991) *The instructional effects of feedback in test-like events*. Review of Educational Research, 61 (2), 213 – 238.

Barnes, N. (2001) *What makes research useful?* Education Week, April 25, 2001.

Bell, J. (1993) *Doing Your Research Project*. Milton Keynes, Open University Press.

Berlin, I. (1996) *The Sense of Reality*. London, Chatto and Windus.

Bernthal, P, R. (1995) *Evaluation that goes the distance*. Training and Development, 49 (9), 41 – 45.

Blumenfeld-Jones, D. (1995) *Fidelity as a criterion for practising and evaluating narrative inquiry*. International Journal of Qualitative Studies in Education, 8 (1), 25 – 33.

Boud, D., and Walker, D. (1998) *Promoting Reflection in Professional Courses: the challenge of context studies*. Higher Education, 23 (2), 191 – 206.

Brinkeroff, R. (1988) *An Integrated Evaluation Model for HRD*. Training and Development Journal, 427 (2), 66 – 68.

Brockett, R. G., and Hiemstra, R. (1991) *Self direction in Adult Learning: Perspectives on Theory, Research and Practice*. New York, Routledge.

Brookfield, S. (1995) *Adult Learning: An Overview*. In Tuinjmans, A (1995) *International Encyclopedia of Education*, Oxford, Pergamon Press.

Bryman, A. (2001) *Social Research*. Oxford, Oxford University Press.

Bryman, A. (2006) *Integrating quantitative and qualitative research: how is it done?* Qualitative Research, 6 (1), 97 – 113.

Buchanan, D. R. (1992) *An Uneasy Alliance: Combining Qualitative and Quantitative Research*. Health Education Quarterly, 19 (1), 117 – 135.

Buckley, R., and Caple, J. (2004) *The Theory and Practice of Training*. London, Kogan Page.

Butler, D. L., and Winne, P. H. (1995) *Feedback and self-regulated learning: A theoretical synthesis*. Review of Educational Research, 65, 245 – 281.

Carroll, J. M., and Kay, D. S. (1988) *Prompting, Feedback and Error Correction in the design of a Scenario Machine*. International Journal of Man-Machine Studies, 28 (1), 11 – 27.

Clariana, R. B., Wagner, D., and Murphy, L. R. (2000) *Applying a connectionist description of feedback timing*. Educational Technology Research and Development, 48, 5 – 11.

Cohen, L., Manion, L., and Morrison, K. (2003) *Research Methods in Education*. London, Routledge Falmer.

Curry, L. (1991) *Patterns of learning style across selected medical specialities*. Educational Psychology, 11, 247 – 277.

Delgado, A. R., and Prieto, G. (2003) *The effect of item feedback on multiple-choice test responses*. British Journal of Psychology, 94 (1), 73 – 85.

DfES (2004) *Every Child Matters: Change for Children*. HMSO.



Diener, E., and Crandall, R. (1978) *Ethics in Social and Behavioural Research*. Chicago, University of Chicago Press.

Ding, L. (1998) *Revisiting assessment and learning: implications of students' perspective on assessment feedback*. Paper presented to Scottish Educational Research Association Annual Conference, Dundee, 24<sup>th</sup> – 26<sup>th</sup> September.

Dixon, N.M. (1987) *Meet Training's Goals without Reaction Forms*. Personnel Journal, 66 (8), 108 – 115.

Dixon, N. M. (1990) *The Relationship between Trainee Responses on Participant Reaction Forms and the Posttest Scores*. Human Resource Development Quarterly, 1, 129 – 37.

Elliot, J. (2001) *Making Evidence-based Practice Educational*. British Educational Research Journal, 27 (5), 555 – 574.

Eraut, M. (2000) *The Dangers of Managing with an Inadequate View of Knowledge*. Paper presented to the Third International Conference of Socio-Cultural Psychology, in Symposium, *Turning Knowledge Management Upside Down*, Brazil, July 2000.

Ferster, C. B., and Skinner, B. F. (1957) *Schedules of Reinforcement*. B.F. Skinner Foundation (reprinted 1997).

Frank, G. (1997) *Is there Life after categories? Reflexivity in qualitative research*. The Occupational Therapy Journal of Research, 17, 84 – 98.

FTDL Project (2003) *Student Feedback Systems: Teaching Quality Systems in Business and Management Studies: The Student Interface*. FDTL Project – Loughborough University Business School.

Geertz, C. (1973) *Thick description: towards an interpretive theory of culture*. In. C. Geertz (ed.) *The Interpretation of Cultures*. New York, Basic Books.

Glaser, B.G., and Strauss, A.L. (1967) *The Discovery of Grounded Theory*. Chicago, Aldane.

Guskey, T.R. (1999) *New Perspectives on Evaluating Professional Development*. Paper presented at the annual meeting of the American Educational Research Association, Montreal, Canada.

Guskey, T. R. (2001) *Bloom's Contributions to Curriculum, Instruction, and School Learning*. Paper presented at the Annual Meeting of the American Educational Research Association, Seattle, WA.

Hammersley, M. (1992) *What's wrong with Ethnography?* London, Routledge.

Hawkins, B.S.R. (1990) *The Management of Staff Development in a Contracting Education Service* Unpublished Ph.D thesis, Birmingham Polytechnic.

Higgins, R. (2000) *'Be more critical!' Rethinking Assessment Feedback*. Paper presented to British Education Research Association Conference. Cardiff University. September 7<sup>th</sup> – 10<sup>th</sup>, 2000.

Hinett, K. and Weeden, P. *How am I doing? Developing Critical Self Evaluation in Trainee Teachers*. Quality in Higher Education, November 2000.

Hockey, J. (1993) *Research Methods: Researching Peers and Familiar Settings*. Research Papers in Education, 8 (2), 199 – 225.

Hoefflin, G., and Frauenfelder, U.H. (2000) *Exchanging know-how for knowledge in lifelong learning: An interface approach*. In Alheit, P., Beck, J., Kammler, E., Taylor, R., and Salling Olesen, H. (eds) *Lifelong learning inside and outside schools*. (102 – 113) Roskilde, Roskilde University, Universitat Bremen and Leeds University.

Holton, E. F. *The Flawed Four-level evaluation model*. Human Resource Development Quarterly, 1, 5 – 21.

Holton, E. F., Bates, R. A., and Ruona, E. E. A. (2000) *Development of a generalised learning transfer system inventory*. Human Resource Development Quarterly, 11 (4), 333 – 360.

Hounsell, D. (1987) *Essay writing and the quality of feedback*. In Richardson, J., Eysenck, M.W., and Piper, D. W. (eds) *Student Learning: research in education and cognitive psychology*. Milton Keynes, Open University Press.

Hyland, F. (1998) *The Impact of Teacher Written feedback on individual writers*. Journal of Secondary Language Writing, 7 (3), 255 – 286.

Hubbard, G., Backett-Milburn, K., and Kemmer, D. (2001) *Working with emotion: issues for the researcher in fieldwork and teamwork*. International Journal of Social Research Methodology. 4 (2), 119 – 137.



Huett, J. (2004) *Email as an educational feedback tool: Relative advantages and Implementation guidelines*. International Journal of Instructional Technology and Distance Learning, 1 (6).

Ivanic, R., Clark, R., and Rimmershaw, R. (2000) *What am I supposed to make of this? The messages conveyed to students by tutors' comments*. In Lea, M.R., and Stierer, B. (Eds) *Student Writing in Higher Education: New Contexts*. Buckingham, Society for Research in Higher Education and Open University Press.

Kluger, A. N., and DeNisi, A. (1996) *The Effects of Feedback Interventions on Performance: Historical Review, a Meta-Analysis and a Preliminary Feedback Intervention Theory*. Psychological Bulletin, 119, 254 – 284.

Kimmel, A.J. (1988) *Ethics and Values in Applied Social Research*. Beverley Hills, Sage Publications.

Kirkpatrick, D. (1994) *Evaluating Training Programs: The Four Levels*. San Francisco, Beritt-Koehter.

Kolb, D. A. (1994) *Learning styles and disciplinary differences*. In Feldman, K. A., and Paulsen, M. B. *Teaching and learning in the college classroom*, 151 - 164. Needham Heights, Ma, Ginn Press.

Kulhavy, R. W., and Stock, W. A. (1989) *Feedback with written instruction: The place of response certitude*. Educational Psychology Review, 1 (4), 279 – 308.

Layder, D. (1998) *Modern Social Theory: Key Debates and New Directions*. London, UCL Press.

Lea, M. R., and Street, B. V. (2000) *Student writing and staff feedback in higher education: an academic literacies approach*. In Lea, M. R., and Stierer, B. (eds) *Student Writing in Higher Education: New Contexts*. Buckingham, Society for Research in Higher Education and Open University Press.

LeGallais, T. (2003) *Strangely Native: an exploration of a researcher's journey from her native territory into the strange world of FE and the resultant insider / outsider identity crisis*. Paper presented at The LDSA Conference, Warwick University.

Logan, T. (1984) *Learning through interviewing*. In Schoslak, J., and Logan, T. *Pupil Perspectives*, London, Croom Helm.

Loughran, J., Mitchell, I. J., and Mitchell, J. A. (2003) *Attempting to document teachers' professional knowledge*. International Journal of Qualitative Studies in Education, 16 (6), 853 – 875.

Mason, B. J., and Bruning, R. (2001) *Providing feedback in computer-based instruction: What the research tells us*. Accessed February 2005, from <http://dwb.unl.edu/Edit/MB/MasonBruning.html>

Mason, J. (2006) *Mixed methods in a qualitatively driven way*. *Qualitative Research*, 6 (1), 9 – 25.

Maxwell, J.A. (1992) *Understanding and validity in qualitative research*. *Harvard Educational Review*, 62 (3), 279 – 300.

Mischler, E.G. (1990) *Validation in inquiry-guided research: the role of exemplars in narrative studies*. *Harvard Educational Review*, 60 (4), 415 – 42.

Mitchell, I. J. (1999) *Bridging the gulf between research and practice*. In J.J. Loughran (ed.) *Researching teaching: methodologies and practices for understanding pedagogy*. London, Falmer Press.

Morgan, D. I. (1998) *Practical Strategies for Combining Qualitative and Quantitative Methods: Applications for Health Research*. *Qualitative Health Research*, 8, 362 – 376.

Mory, E. (1992) *The use of informational feedback in instruction: Implications for future research*. *Educational Training Research and Development*, 40 (3), 5 – 20.

Murray, H. G. (1997) *Does evaluation of teaching lead to improvement in teaching?* *International Journal of Academic Development*, 2 (1), 8 – 23.

Narciss, S. (1999) *Motivational effects of the informativeness of feedback*. Paper presented at the annual meeting of the American Educational Research Association, Montreal, Quebec, Canada.

Panasuk, R., and Le Baron, J. (1999) *Student Feedback: A Tool for Improving Instruction*. *Education*, 120 (2), 356 – 368.

Patton, M.Q. (1980) *Qualitative Evaluation Methods*. Beverly Hills, Sage Publications.

Pawson, R., and Tilly, N. (1997) *Realistic Evaluation*. London, Sage.

Plummer, K. (1983) *Documents of Life: an Introduction to the Problems and Literature of a Humanistic Method*. London, Allen & Unwin.



- Polyani, M. (1958) *Personal Knowledge: Towards a Post Critical Philosophy*. New York: Harper and Row, London, Routledge and Kegan Paul.
- Powney, J., and Watts, M (1987) *Interviewing in Educational Research*, London, Routledge and Kegan Paul Ltd.
- Preskill, H., and Torres, R. T. (1999) *Evaluative inquiry for learning in organisations*. Thousand Oaks, CA, Sage Publications.
- Pridemore, D., and Klein, J. D. (1995) *Control of Practice and the level of feedback in computer-based instruction*. Contemporary Educational Psychology, 20, 444 – 450.
- Rogers, A. (1996) *Teaching Adults (2<sup>nd</sup> ed)* Buckingham, Open University Press.
- Scheff, T, J. (1990) *Microsociology: discourse, emotion and social structure*. Chicago, University of Chicago Press.
- Schofield, J.W. (1993) *Increasing the generalizability of qualitative research*. In M. Hammersley (ed.) *Social Research: Philosophy, Politics and Practice*. London, Sage Publications in association with Open University Press.
- Schwandt, T. A. (2000) *Further Diagnostic Thoughts on What Ails Evaluation Practice*. American Journal of Evaluation, 21 (2), 225 – 235.
- Senge, P.M. (1998) *The Fifth Discipline: The Art and Practice of The Learning Organisation*. London, Random House UK Ltd.
- Simons, H. (2002) *Utilising evaluation evidence to enhance professional practice*. Revised version of paper presented at The European Evaluation Society 5<sup>th</sup> Biennial Conference: *Three Movements in Contemporary Evaluation: Learning, Theory and Evidence*, Seville, Spain 10 – 12<sup>th</sup> October 2002.
- Skinner, B.F. (1974) *About Behaviourism*. New York, Vintage.
- Sparks, D. (1996) *Viewing reform from a systems perspective*. The Developer. 2 – 6.
- Strathern, M. (2000) *The tyranny of Transparency*. British Educational Research Journal. 26 (3), 309 – 321.
- Tesluk, P. E., Farr, J. L., Mathieu, J. E., & Vance, R. J. (1995). *Generalization of employee involvement training to the job setting*:

*Individual and situational effects.* Personnel Psychology, 48, 607 - 632.

Tomlinson, P. (1999) *Conscious reflection and implicit learning: Towards a balance in teacher preparation. Part II: Implications for a balances approach.* Oxford Review of Education, 25 (4), 533 – 544.

Tracey, J.B., Tannenbaum, S. I., and Kavanaugh, M.J (1995) *Applying Training Skills on the Job: The Importance of the Work Environment.* Journal of Applied Psychology, 80, 239 – 52.

Turner, K. (1993) *You do not seem to have understood the question.* Unpublished M.A. dissertation. Department of Educational Research, Lancaster University.

Von Krogh, G., Ichijo, K., and Nonaka, I. (2000) *Enabling knowledge creation: How to unlock the mystery of tacit knowledge and release the power of innovation.* Oxford, Oxford University Press.



# APPENDICES

## APPENDIX 1

### Profile of the Initial Study interview sample

<b>Profile Areas</b>	<b>Advisory Service</b>	<b>Independent Company</b>
<b>Gender</b>	All female	All male
<b>Length of adult training experience</b>	Ranged 3 – 5 years	Ranged 15 – 6 years
<b>Type of adults trained</b>	Primary teachers	Primary teachers
<b>Organisational status</b>	1 x middle manager 2 x no management responsibility	1 x Company Director 1 x no management responsibility
<b>Specifically trained to train adults</b>	2 x no specific training 1 x Scout and Guide Leader training	1 x Scout and Guide Leader Training 1 x Adult Education training
<b>Career prior to adult training</b>	All teachers	All teachers
<b>Specialist subject area (for training)</b>	English and Literacy	Information Technology



## **APPENDIX 2**

### **Initial Study**

#### **Semi –structured interview schedule**

These interviews are planned to last approximately one hour, will be tape recorded and later transcribed.

1. Clarify the context for the interview – to talk about the interviewee's professional development as a trainer training adults. Stress that responses will be completely confidential, and what will happen to the information following the interview.
2. Ask a number of questions to gain a biographic perspective of the interviewee, for example, how long have you been training adults in your current job? Were you involved in teaching or training adults in your previous job, or jobs? What do you find most enjoyable about your work training adults? What's least enjoyable?
3. Move to asking about the nature of the training courses the interviewee provides. (I'm interested in the type of training course you are involved in delivering, for example, are these courses predominantly ones which are pre-planned by other agencies for you to deliver from a script, or do you plan and prepare courses from scratch? Are the courses matched to the needs of the participants? Are the courses content or concept driven? How long are they – half day, day, sequence of training or conference)
4. Did you have any specific training to support your training of adults? Is 'training to train' part of your ongoing professional development provision within the organisation / company? How would you say you judge whether the training you have delivered

has been successful? Prompt to get them to elaborate and give examples this.

5. So – what factors motivate you to change your methods, style of delivery, activities, course content? Again prompt for some detail of examples where changes have been made. Do they consider that they are quite quick to change or that they take a more considered and reflective approach to making changes. What value do trainers place on any of these factors – which do they consider to be the most reliable feedback?
6. So the aspects you are more likely to repeat – are they the ones you have found most engaging for the participants or the ones which you feel are most successful in supporting participant learning?
7. If interviewee has mentioned reaction evaluation response. Probe a little deeper into role of evaluation comments in different contexts of training. Also consider how reaction eval comments and the trainer's own learning are equated – how relevant to learning are comments considered to be, how much value would be placed on one comment, does this link to any knowledge the trainer has of the participant (do we more readily ignore people we do not know, and are unlikely to meet again?)



## APPENDIX 3

### The revised list of feedback factors

(created following validation of the Initial Study feedback factor list.)

<b>Code</b>	<b>Comments from Reaction Evaluation forms</b>
<b>1</b>	
<b>2</b>	Observing participant response during training, and from these making judgements about the effectiveness of activities and training methods
<b>3</b>	Receiving formal feedback following performance management observation
<b>4</b>	Considering the effect of learning activities when attending a course as a participant
<b>5</b>	Putting self in place of participants when observing others training
<b>6</b>	Discussion with peers about own performance following training delivered with a partner trainer
<b>7</b>	Being requested to provide more training
<b>8</b>	Observation of the transfer of elements of training into classrooms
<b>9</b>	Making changes following own study, for example, reading about methods of training found to be effective for adults
<b>10</b>	Observing other trainers at work and making judgements about effective behaviours and activities
<b>11</b>	Making changes as a result of formalised peer coaching

## APPENDIX 4

### Feedback related to training skills

#### Sample data collection sheet

This is an example of the data collection sheet completed by each adviser during the feedback sorting activity.

<b>Skills identified during training skills discussion Dec 2004</b>	<b>Codes for Feedback Mechanisms used to support development of the training skills.</b>
Write clear aims and objectives related to the learning event.	R      D      E
Select appropriate visual aids.	S      T      L
Deliver a training presentation.	T      P
Prepare appropriate materials – handouts.	L      T
Maintain audience interest and involvement.	T      S      D      R
Use feedback, handling both conflict and resistance in training.	P
Use interactive training methods – games, simulations.	S      T      L
Facilitate group activities.	T
Ability to schedule a learning event.	
Ensure equal opportunities in training.	S      E
Evaluate own practice.	D      R
Develop own practice.	D      R



### Key to Feedback Mechanism Codes:

E – Reaction Evaluation	T – Observing other trainers at work
M – Receiving formal feedback following performance management	P – Observing participant response during training
S – Putting self in place of participants when observing others training	D – Discussion with peers about own performance following training delivered with a partner trainer
C – Observation of transfer into classroom	R – Being requested to do more training
A – Making changes following own study	L – Considering the effect of learning activities when attending a course as a participant.
F – Making changes as part of formalised peer coaching	

## **APPENDIX 5**

### **Interview Question Schedule**

1. In your profile, of the feedback mechanisms you identified as those you used most frequently, you put particular emphasis on \_\_\_\_\_ & \_\_\_\_\_. Could you explain why these are particularly important to you as you work to improve your training?
2. In your profile you put little emphasis on \_\_\_\_\_ & \_\_\_\_\_. Could you explain why these feedback mechanisms are less important to you?

Unpick somewhere above how important participant sees reaction evaluation for organisation and how important for participant.

I'd like to focus on reaction evaluation for the next part of the interview.

1. How successful are the grades collated from reaction evaluation work in providing you with verification of what was effective and less effective for participants on the training?
2. Do you find that the written comments provided by participants act to give an elaboration of the grades that will enable you to make a more focused response and so improve training? (Are comments generally relevant to the course? From comments do you generally get the impression that participants understand the intention of the course / aims and objectives? Do participants provide enough written comments?)



3. How motivational do you find reaction evaluation feedback – either positive or negative?

Finally could we consider two more general aspects of feedback?

1. Responding to feedback is a decision making process – what role does having a period of reflection before making a decision play for you as part of this decision making process?

(Do you feel that there is enough time for reflection / not enough time?)

2. Where would you place yourself along this continuum? Could you explain your view?

## **APPENDIX 6**

### **Coding Key for Consultant Interviews**

#### **Category 1 - Trainer context related statements**

**TRCULT – training culture**

**TREXP – trainer experience**

**TRBEHAV – trainer behaviour**

**TRPERSON – trainer persona**

**TRKNOW – trainer knowledge**

**TRCONF – trainer confidence**

**COMJOB – comment on trainer job**

**TRATMTNDS – trainer attempts to meet needs**

**TRBELTR – trainer belief about training**

**TREXPIMP – trainer expectation of impact**

**CLIMP – classroom impact**

**EVALIMP – evaluating impact**

**TRCHGE – training change**

**CHGEEX – change example**

**TRCHGENFB – training change not related to feedback**

**TRVIEWTR – trainer view of training (applied after evaluation)**

**TRRESCONTXT – trainer response to training context**

**TRNEEDFROMFB – trainers' needs from feedback**

**MOVCHGE – motivation to change**

**MOVCHGETR – motivation to change training**

**REFTEACH – reference to teaching**



## **Category 2 - Trainer feedback related statements**

**TRRESFB – trainer response to feedback (participant /gen)**

**TRRESNEGFB – trainer response to negative feedback (gen)**

**IMMREC – making change immediately**

**TRIMMRES – training immediate response**

**NEGFBVPOSACT – negative feedback versus positive activity?**

## **Category 3 - Statements related to trainer feedback mechanisms**

**OS – own study**

**TRRESOS – trainer response to own study**

**OOTR – observing other trainers**

**OOTTIPS – observing other trainers – getting tips**

**REASONOBS – reason for observing trainer behaviour**

**POSBEHAVOBS – positive training behaviour observation**

**NEGBEHAVOBS – negative training behaviour observation**

**TRPERCEPTR – trainer perception of trainer response**

**OBSPARTRESTR – observe participant response to another trainer**

**FORMFB – Formal feedback**

**INFORMFB – Informal feedback**

**OBTC – observation of transfer into classroo**

**RMT – Being requested to do more training**

**FBC – formalized peer coaching**

**RESPEERS – responding to peers**

**(RESPEERSRE – responding to reaction evaluation with peers)**

**TRPEERREL – trainer peer relationship**

## **Category 4 - Statements related to reaction evaluation**

**RECONXT** – reaction evaluation context

**REQROLE** – reaction evaluation questions role

**COMMROLE** – role of reaction evaluation comments

**GRROLE** – role of reaction evaluation grades

**COMMVGR** – comment versus grade comparison

**TRUNRE** – trainer understanding of reaction evaluation

**REGREFF** – reaction evaluation grades are effective

**TRPERCEPRE** – trainer perception of reaction evaluation comments

**REIMMFB** – reaction evaluation provides immediate feedback

**TRRESRE** – trainer response to reaction evaluation

**TRRESGR** – trainer response to grade

**TRRESCOM** – trainer response to comment

**TRCHGERE** – training change resulting from reaction evaluation

**PARTCWABIL** – participant comment writing ability

**PARTRESCOM** – participant response to writing comments

**PARTUNDEVALOC** – participant understanding of evaluation outcome

**PARTRESEVAL** – participant response to evaluation

**PARTEVALFACTS** – participant evaluation factors

**PARTMOOD** – participant mood

**POSMDMOVCHGE** – positive mood motivates change (participant)

**PARTEXPECT** – participant expectation

## **Category 5 - Statements related to trainer perception of participants**

**TRPERCEPPART** – trainer perception of participant (views, moods, and actions)



## **Category 6 - Statements related to trainer evaluation experience**

**INPARTSH – trainer placing self in participants' shoes**

**TREXPART – trainer experience as participant**

**PARTREACT – trainer's own reaction when a participant on training**

**TREXPARTRE – trainer experience of completing reaction evaluation**

**TRABILEVAL – trainer ability to evaluate**

## **Category 7 - Statements related to the relationship between trainer and participant**

**PARTPARTL – participant partnership in learning**

**TRPARTREL – trainer participant relationship**

## **Category 8 - Statements related to the organisational nature of evaluation**

**EVALEMP – evaluation emphasis – a comment about the nature of evaluation in the organisation / system**

## APPENDIX 7

(Statements occurring in interviews of all classes of consultant (Non-user, Mid-user, User) indicated in bold.)

### **Category 4 - Statements related to reaction evaluation**

RECONXT – reaction evaluation context

**COMRE – general statement about reaction evaluation**

REQROLE – reaction evaluation questions role

COMMROLE – role of reaction evaluation comments

GRROLE – role of reaction evaluation grades

**COMMVGR – comment versus grade comparison**

TRUNRE – trainer understanding of reaction evaluation

REGREFF – reaction evaluation grades are effective

TRPERCEPRE – trainer perception of reaction evaluation comments

REIMMFB – reaction evaluation provides immediate feedback

**TRRESRE – trainer response to reaction evaluation**

**TRRESGR – trainer response to grade**

**TRRESCOM – trainer response to comment**

TRCHGERE – training change resulting from reaction evaluation

**PARTCWABIL – participant comment writing ability**

**PARTRESCOM – participant response to writing comments**

**PARTUNDEVALOC – participant understanding of evaluation outcome**

**PARTRESEVAL – participant response to evaluation**

**PARTEVALFACTS – participant evaluation factors**

**PARTMOOD – participant mood**

**POSMDMOVCHGE – positive mood motivates change (participant)**

**PARTEXPECT – participant expectation**